

Department of Transportation
Federal Highway Administration
Central Federal Lands Highway Division

CA PFH 114-1(1)
Hyampom Road
Shasta Trinity National Forest
Shasta County, California

INVITATION FOR BID

This invitation for bid cites Federal Highway Administration
Specifications FP-03, 2003, Metric

Cut & Paste on Bid Submittal Envelope

OF-17 (cflhd7/03)

FAR (48) CFR 53.214(g)

OFFER LABEL

FAR (48) CFR 53.215-1(h)

NOTICE TO OFFEROR

1. THIS LABEL MAY ONLY BE USED ON ENVELOPES LARGER THAN 156 mm (6 ½ INCHES) IN HEIGHT AND 292 mm (11 ½ INCHES) IN LENGTH.
2. Print or type your name and address in the UPPER left corner of the envelope containing your offer.
3. Complete the bottom portion of this form and paste it on the lower left corner of the envelope, unless the envelope is 156 mm by 292 mm (6 ½ inches by 11 ½ inches) or smaller.

OFFER

SOLICITATION NO.

DATE FOR RECEIPT OF OFFERS

TIME FOR RECEIPT OF OFFERS

OFFICE DESIGNATED TO RECEIVE OFFERS

Contractor _____

Street Address _____

City/State/Zip _____

State:	California
County:	Trinity
Location:	Shasta-Trinity National Forest
Length:	Schedule A = 6.145 kilometers
Type of Improvement:	Grading, drainage and asphalt surfacing

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NOTICE TO BIDDERS AND OFFERORS

Before mailing your offer, please check the following:

- Your offer sets forth full, accurate, and complete information as required by this solicitation, including representations and certifications/bidder qualifications and acknowledgement of any amendments that may have been issued.
- You have completed the bid schedule and checked your bid figures, including calculations on your work sheets.
- You have provided the required minimum Bid Guarantee in proper form and amount including Power of Attorney Affidavit. See FAR Provision 52.228-1.
- You have completed and signed all required documents.

INVITATION FOR BID BOOKLET

It is the responsibility of the bidder to verify that this solicitation booklet is complete as listed in the table of contents. Also, the bidder is responsible for submitting all required forms and documents with the bid.

Applicable FAR provisions and clauses in this IFB are incorporated by reference or full text. FAR provisions and clauses incorporated by reference can be accessed on the Internet at www.arnet.gov/far/. Bidders are strongly encouraged to review the provisions and clauses referenced in this document before submitting a bid.

Bidders **must** fill out and submit with their offer only the following: (1) this page completed, which indicates interest in partnering; (2) pages A-1 and A-2; (3) pages number B-1 through B-13 (4) Sections C and D in their entirety; and (5) page F-3 of the Contract Clauses indicating Bidder's option to waive the price evaluation preference for HUBZone Certified Firms. **RETAIN THE REMAINING PAGES.**

PARTNERING (See Subsection 103.05 of the FP)

Please indicate your interest in participating in Partnering by checking the appropriate blank below.

- ☐ The offeror is interested in participating in partnering.
- ☐ The offeror is not interested in participating in partnering.

NOTICE TO BIDDERS AND OFFERORS

BONDING

FAR Provision 52.228-1, Bid Guarantee, requires a bid guarantee of not less than 20 percent of the amount of the bid (see page A-3). A bid bond from a corporate surety must be from a surety acceptable to the Government as appearing on the Department of the Treasury's list of approved sureties. The bid bond must have an original signature and an embossed seal for the surety. If a Power of Attorney is required with the bid bond, an original, photocopy or facsimile of an original Power of Attorney is sufficient evidence of authority to bind the surety. If the Power of Attorney form contains any language stating that the Power of Attorney can be revoked at any time, the document must contain an original signature or an embossed seal in the certification section.

Small business concerns, including minority business enterprises, may obtain assistance in securing necessary bonding for this project by contacting the office of the Small Business Administration located in their State.

INDIVIDUAL SURETIES

See FAR contract clause 52.228-11, Pledges of Assets.

UTILIZATION OF SMALL BUSINESS, HUBZone SMALL BUSINESS, SMALL DISADVANTAGED BUSINESS, WOMEN-OWNED SMALL BUSINESS, VETERAN OWNED, AND SERVICE-DISABLED VETERAN OWNED SMALL BUSINESS CONCERNS SUBCONTRACTING PROGRAM

FAR Clause 52.219-8, Utilization of Small Business Concerns states that Prime Contractors afford small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns the maximum practicable opportunity to participate in performing contracts let by any Federal agency.

FAR Clause 52.219-9, Small Business Subcontracting Plan, Alternate I, requires that the large business concern who is the successful low bidder on a Federal project with an anticipated award amount exceeding \$1 million, is required to submit a subcontracting plan prior to contract award. The subcontracting plan expresses goals in terms of percentages of total planned subcontracting dollars for the use of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. To view and download a sample plan for subcontracting requirements, visit <http://www.cflhd.gov/procurement/construction/reference-links.cfm>. If the apparent successful low bidder fails to submit a subcontracting plan acceptable to the CO within the allowable time, that bidder may be ineligible for award of the contract.

A list of currently known business concerns owned and controlled by socially and economically disadvantaged individuals and/or women-owned small business concerns that have indicated an interest in participating in highway construction is available at <http://www.ccr.gov>

NOTICE TO BIDDERS AND OFFERORS

PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS

The award of this contract is subject to a 10% Price Evaluation Preference for HUBZone Small Business Concerns (SBC). Refer to FAR Clause 52.219-4. This price evaluation preference can apply to any qualified HUBZone SBC certified by the Small Business Administration. For any HUBZone SBC electing to waive the preference, see Page F-3 of this solicitation.

NOTICE TO POTENTIAL HUBZONE SBC BIDDERS

In the event this full and open competition results in a contract award to a qualified HUBZone SBC after a price evaluation preference, FAR Clause 52.236-1, Performance of Work by the Contractor, on page F-4, does not apply.

§126.700 of the Code of Federal Regulations (Title 13, Part 126, Subpart G), stated below, will replace the performance of work requirements stated in the above mentioned FAR clause.

A qualified HUBZone SBC receiving a contract under this solicitation for general construction must spend at least 50% of the cost of the contract incurred for personnel on its own employees or employees of other qualified HUBZone SBCs. This requirement may be met by expending at least 50% of the cost of the contract incurred for personnel on its employees or it may subcontract at least 35% of the cost of the contract performance incurred for personnel to one or more qualified HUBZone SBCs. A qualified HUBZone SBC prime contractor may not, however, subcontract more than 50% of the cost of the contract incurred for personnel to non-qualified HUBZone SBCs.

PROGRESS PAYMENTS

DFARS 204.7302, NASA, DOT and Treasury FAR Supplements, requires prospective bidders be registered in Central Contractor Registration (CCR) system prior to the award of a contract, basic agreement, basic ordering agreement, or blanket purchase agreement (Refer to FAR Clause 52.204-7, Central Contractor Registration). The DOT has partnered with the Department of Defense (DOD) to use the CCR system to obtain contractor financial electronic funds transfer (EFT) information.

NOTICE TO BIDDERS AND OFFERORS

FAR Clause 52.232-33, Payment by Electronic Funds Transfer -- Central Contractor Registration requires that the EFT information in the CCR must be accurate in order for contractors' invoices to be considered proper invoices for the purpose of prompt payment. Contractors must input and maintain their current EFT information.

To register in CCR, access the following DOD web site: www.ccr.gov .

FAR Clause 52.232-5, Payments Under Fixed-Price Construction Contracts, states reimbursement will be made for premiums paid by the Contractor to obtain performance and payment bonds as required under this contract. As specified in the Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP), Section 151, Mobilization, payment for performance and payment bond premiums will be included in the mobilization item and shall not be in addition to the contract price.

FAR Clause 52.232-27, Prompt Payment for Construction Contracts, states the due date for progress payments shall be the 14th day after receipt of a proper payment request by the Government's designated billing office. Bidders are advised to review Subsection 109.08, Progress Payments and Subsection 109.05, Scope of Payment of the FP concerning direct and indirect payments.

FACSIMILE OR TELEGRAPHIC BIDS ARE NOT AUTHORIZED FOR THIS SOLICITATION

Bids may be modified or withdrawn by facsimile or telegraphic notice, if such notice is received by the time specified for receipt of bids. The Government will not be responsible for ANY failure attributable to the transmission or receipt of telegraphic or facsimile data. See FAR Provision 52.214-5, Submission of Bids.

FAX Number to submit modifications to bids for this project is (916) 498-5008.

SOLICITATION, OFFER AND AWARD <i>(Construction, Alteration or Repair)</i>	1. SOLICITATION NO. DTFH68-08-B-00011	2. TYPE OF SOLICITATION <input checked="" type="checkbox"/> SEALED BID (<i>IFB</i>) <input type="checkbox"/> NEGOTIATED (<i>RFP</i>)	3. DATE ISSUED 02/21/08	PAGE OF PAGES 1 OF 2
IMPORTANT - THE "OFFER SECTION ON THE REVERSE MUST BE FULLY COMPLETED BY OFFEROR.				
4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO.	6. PROJECT NO. CA PFH 114-1(1), Hyampom Road		
7. ISSUED BY: FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS DIVISION 12300 WEST DAKOTA AVENUE, SUITE 167 LAKEWOOD, COLORADO 80228		CODE: 69050001	8. ADDRESS OFFER TO: Mr. Gene Fong, Division Administrator Federal Highway Administration California Division Office Attn: Mr. Scott McHenry 650 Capitol Mall, Suite 4-100 Sacramento, CA 95814	
9. FOR INFORMATION CALL SEE PAGE A-3	A. NAME: SEE PAGE A-3	B. TELEPHONE NO. (<i>Include area code</i>) SEE PAGE A-3		
<p style="text-align: center;">SOLICITATION</p> <p style="text-align: center;"><i>NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder."</i></p>				
10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS: CONSTRUCTION OF CA PFH 114-1(1), HYAMPOM ROAD, IN STRICT ACCORDANCE WITH: <ol style="list-style-type: none"> 1. FEDERAL ACQUISITION AND TRANSPORTATION ACQUISITION REGULATIONS (<i>FAR & TAR</i>) 2. DEPARTMENT OF LABOR, DAVIS BACON MINIMUM WAGE RATES (<i>See Section G</i>) 3. SPECIAL CONTRACT REQUIREMENTS (<i>See Section I</i>) 4. PLANS 5. BID SCHEDULE (<i>See Section B</i>) 6. STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS, FP-03, 2003, METRIC 7. SUBCONTRACTING PLAN (IF APPLICABLE) <p>See Subsection 104.04 of the FP for governing order of precedence</p> <p style="text-align: right;">* TO BE SPECIFIED IN BLOCK 21 PRIOR TO AWARD OF CONTRACT</p>				
11. The Contractor shall begin performance within <u>10</u> calendar days and complete it within <u> </u> * calendar days after receiving <input type="checkbox"/> award <input checked="" type="checkbox"/> notice to proceed. The performance period is <input checked="" type="checkbox"/> mandatory <input type="checkbox"/> negotiable.				
12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? (<i>If "YES," indicate within how many calendar days after award in Item 12B.</i>) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO				12B. CALENDAR DAYS 10
13. ADDITIONAL SOLICITATION REQUIREMENTS: <ol style="list-style-type: none"> A. Sealed offers in original and <u>0</u> copies to perform the work required are due at the place specified in Item 8. by <u>2:00 p.m.</u> (hour) local time on <u>03/25/08</u> (date). If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due. B. An offer guarantee <input checked="" type="checkbox"/> is <input type="checkbox"/> is not required. C. All offers are subject to the (1) work requirements and (2) other provisions and clauses incorporated in the solicitation in full text or by reference. D. Offers providing less than <u>60</u> calendar days for Government acceptance after the date offers are due will not be considered and will be rejected. 				

OFFEROR (Must be fully completed by offeror)

14. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)					15. TELEPHONE NO. (Include area code)				
CODE					16. REMITTANCE ADDRESS (Include only if different than Item 14)				
FACILITY CODE					SEE INDIVIDUAL BID SCHEDULE(S)				
17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing with __ calendar days after the date offers are due. (Insert any number equal to or greater than the minimum requirement stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)									
AMOUNTS					SEE INDIVIDUAL BID SCHEDULE(S)				
18. The offeror agrees to furnish any required performance and payment bonds.									
19. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the solicitation - give number and date of each)									
AMENDMENT NO.									
DATE									
20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)					20B. SIGNATURE				20C. OFFER DATE
AWARD (To be completed by Government)									
21. ITEMS ACCEPTED: ALL WORK MUST BE COMPLETED _____ CALENDAR DAYS AFTER ISSUANCE OF THE NOTICE TO PROCEED.									
22. AMOUNT					23. ACCOUNTING AND APPROPRIATION DATA				
24. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 27 (4 copies unless otherwise specified)					25. <input type="checkbox"/> OTHER THAN FULL AND <input type="checkbox"/> OPEN COMPETITION PURSUANT TO 15 U.S.C. 637() <input type="checkbox"/> 41 U.S.C. 253(c)()				
26. ADMINISTERED BY CODE: _____					27. PAYMENT WILL BE MADE BY FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION 12300 W. DAKOTA AVENUE, SUITE 167 LAKEWOOD, COLORADO 80228				
CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE									
<input type="checkbox"/> 28. NEGOTIATED AGREEMENT (Contractor is required to sign this document and return _____ copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all work requirements identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications incorporated by reference in or attached to this contract.					<input type="checkbox"/> 29. AWARD (Contractor is not required to sign this document.) Your offer on this solicitation is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.				
30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN (Type or print)					31A. NAME OF CONTRACTING OFFICER (Type or print)				
30B. SIGNATURE			30C. DATE		31B. UNITED STATES OF AMERICA BY			31C. AWARD DATE	

ADDITIONAL SOLICITATION INFORMATION

Block 9: DATA AVAILABLE FOR REVIEW

The following materials are available electronically at www.cflhd.gov/procurement/construction/advertised-projects.cfm

Geotechnical Report, Hyampom Road, April 2005

Final Geotechnical Investigation and Design Supplemental Report, November 2006

Final Geotechnical Advisory – Retaining Walls, January 2008

Addendum to Final Pavement Design Report, December 2007

The following materials are available electronically:

Manual of Uniform Traffic Control Devices for Streets and Highways, (Current Edition published by U.S. Government Printing Office found at <http://mutcd.fhwa.dot.gov> .

AASHTO Manuals found at <http://fhwapap04.fhwa.dot.gov/index.jsp> under the Standard Specifications and Supplements link.

FP-03, Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, 2003, found at <http://www.cflhd.gov/design/index.cfm#> under the Construction Specs tab.

Contractor Guidelines for Quality Control Plans and example QC Plans found at <http://www.cflhd.gov/design/index.cfm#> under the Construction Specs tab.

For amendments, bid results and tabulations or other procurement information please visit our website at www.cflhd.gov/procurement/construction

Block 13: A bid guarantee of not less than 20 percent of the amount of the bid or \$3 million, whichever is less, is required. If the bidder fails to provide the required bid guarantee in the proper form and amount, such failure may result in rejection of the bid. See FAR Provision 52.228-1, Bid Guarantee. If the bid guarantee is a bid bond, it must be submitted on Standard Form 24. Also refer to Subsections 102.03 and 102.04 of the FP for additional information.

Block 26: The Contractor shall submit invoices to:

FHWA, CFLHD, Project Engineer's Office (Address to be designated at preconstruction conference), for submission to the designated billing office shown in Block 7.

Final billing shall be submitted directly to the address shown in Block 7.

Other: The estimated price range of the project work is between \$20,000,000 and \$25,000,000.

For questions regarding access to the Federal Business Opportunities (FBO) website or how to obtain plans and other solicitation documents, please contact either Brenda McGehee at (720) 963-3353 or Tiffany Atchison at (720) 963-3354.

As explained in FAR Provision 52.214-6, any explanation or interpretation of the solicitation, drawings, specifications, etc must be requested in writing to one of the following:

E-mail address: CFLContracts@fhwa.dot.gov
FAX Number: 720-963-3360
Mailing Address: Federal Highway Administration
Central Federal Lands Highway Division
Attention: Acquisition and Contracting
12300 W. Dakota Avenue, Suite 360
Lakewood, Colorado 80228

Responses will be provided to the individual questioner and also be posted on our website at <http://www.cflhd.gov/procurement/construction/advertised-projects.cfm> under the project link. Potential Offerors are advised to check this site on a regular basis to assure the most current and up-to-date information.

All amendments resulting from this solicitation will be uploaded to the FBO website at http://www.fbo.gov/spg/DOT/FHWA/68/postdatePrevDays_1.html and posted on our website at <http://www.cflhd.gov/procurement/construction/advertised-projects.cfm> under Current Solicitations.

**BIDDERS PLEASE BE ADVISED THAT QUESTIONS RELATIVE TO THIS
IFB WILL NOT BE ACCEPTED AFTER 4 P.M. MST ON MARCH 20, 2008.**

Bid Schedule Instructions

BIDDERS, PLEASE NOTE: Before preparing the bid, carefully read the Solicitation Provisions beginning on Page E-1.

This Bid Proposal is comprised of one schedule as follows:

Schedule A – grading, drainage and asphalt surfacing on 6.145 kilometers of roadway

- Insert a numeric unit bid price for each pay item for which a quantity appears in the bid schedule. When the words “Lump Sum” appear as a unit price, insert an amount for each lump sum pay item.
- Multiply the unit price by the quantity for each pay item and show the amount bid.
- Total all amounts bid for each pay item in Schedule A and show the Total on the line provided on Page B-10 for **PART A CONSTRUCTION COST SUBTOTAL**.
- When completing the bid for Schedule A, provide the number of calendar days necessary to complete all Schedule A work, from the issuance of Notice to Proceed (NTP) until the day of final construction completion. The NTP date and the construction completion date should be included in the number of calendar days necessary to complete all work. The FHWA anticipates a NTP date on or about April 28, 2008. The total number of calendar days bid for Schedule A shall not exceed 930 calendar days and the minimum number of calendar days bid for Schedule A shall not be less than 560 calendar days.
- Multiply the number of days bid by the Road User/Administrative Cost of \$5,000.00 per day and show the total on the line provided on Page B-10 for **PART B ADMINISTRATIVE COST SUBTOTAL**.
- Add **PART A CONSTRUCTION COST SUBTOTAL** and **PART B ADMINISTRATIVE COST SUBTOTAL** to determine the **SCHEDULE A TOTAL COST (A+B)**.

Field Laboratory Trailer – a base bid will be solicited using “Item 15401-0000, Contractor Testing. A bid item alternative, “Item 15401-0000, Contractor Testing, Using Government Furnished Field Laboratory” has been included and requires pricing on Page B-10.

Evaluation Factors for Award

To be eligible for award of a contract, the offeror shall submit prices for each bid item in Schedule A necessary to complete all contract work. The offer shall also provide the number of calendar days necessary to complete all contract work on Schedule A.

Evaluation for award of a contract will consist of the combination of Construction Cost and Road User/Administrative Cost for Schedule A. Accordingly, contract award will be made to the lowest responsible bidder conforming to the solicitation, provided funds are available.

Once the lowest responsible bidder has been selected for award, the Government will determine whether the alternative bid item will be included. If included, Bid Item 15401, Contracting Testing, will be replaced with Bid Item 15401-0000, Contractor Testing, Using Government Furnished Field Laboratory in the awarded contract and the final contract award amount will be determined.

Completion Dates

The total number of calendar of days bid will become the basis for determining the fixed contract completion date (see Subsection 108.03 of FP-03, Metric). It is against this date that liquidated damages will be assessed according to Subsection 108.04, as amended, by the Special Contract Requirements (SCR).

BID SCHEDULE A

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
15101-0000	Mobilization		
	ALL	Lump Sum	\$ _____
15206-0000	Slope, reference, and clearing and grubbing stake		
	6.256		
	km	\$ _____	\$ _____
15214-0000	Survey and staking, miscellaneous		
	ALL	Lump Sum	\$ _____
15214-2000	Survey and staking, retaining wall		
	ALL	Lump Sum	\$ _____
15215-3000	Survey and staking, drainage structure		
	44		
	Each	\$ _____	\$ _____
15215-6000	Survey and staking, roadway cross-sections		
	150		
	Each	\$ _____	\$ _____
15216-2000	Survey and staking, grade finishing stakes		
	12.512		
	km	\$ _____	\$ _____
15401-0000	Contractor testing		
	ALL	Lump Sum	\$ _____
15501-0000	Construction schedule		
	ALL	Lump Sum	\$ _____
15703-2000	Soil erosion control, temporary turf establishment		
	14.0		
	ha	\$ _____	\$ _____
15705-0100	Soil erosion control, silt fence		
	5,100		
	m	\$ _____	\$ _____
15705-1400	Soil erosion control, sediment log		
	500		
	m	\$ _____	\$ _____
15705-1500	Soil erosion control, sediment wattle		
	8,400		
	m	\$ _____	\$ _____
15801-0000	Watering for dust control		
	50,000		
	m3	\$ _____	\$ _____

Bid Schedule

Project: CA PFH 114-1(1)

HYAMPOM ROAD - SCHEDULE A

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
20101-0000	Clearing and grubbing 14.0 ha	\$ _____	\$ _____
20201-0000	Selective clearing 0.80 ha	\$ _____	\$ _____
20220-1000	Removal, individual tree 10 Each	\$ _____	\$ _____
20301-1900	Removal of pipe culvert 17 Each	\$ _____	\$ _____
20301-2400	Removal of signs 7 Each	\$ _____	\$ _____
20304-1000	Removal of structures and obstructions ALL	Lump Sum	\$ _____
20401-0000	Roadway excavation 94,000 m3	\$ _____	\$ _____
20402-0000	Subexcavation 1,000 m3	\$ _____	\$ _____
20410-0000	Select borrow 2,000 m3	\$ _____	\$ _____
20441-0000	Waste 3,600 m3	\$ _____	\$ _____
20703-1000	Geogrid, uniaxial 4,400.0 m2	\$ _____	\$ _____
20704-0000	Geomembrane 2,200 m2	\$ _____	\$ _____
20802-0000	Foundation fill 123 m3	\$ _____	\$ _____

Bid Schedule

Project: CA PFH 114-1(1)

HYAMPOM ROAD - SCHEDULE A

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
20811-0000	Shoring and bracing 740 m2	\$ _____	\$ _____
21101-1000	Roadway obliteration, method 1 360 m2	\$ _____	\$ _____
21101-2000	Roadway obliteration, method 2 3,100 m2	\$ _____	\$ _____
25101-2000	Placed riprap, class 2 70.0 m3	\$ _____	\$ _____
25101-3000	Placed riprap, class 3 650.0 m3	\$ _____	\$ _____
25101-4000	Placed riprap, class 4 450 m3	\$ _____	\$ _____
25101-5000	Placed riprap, class 5 420 m3	\$ _____	\$ _____
25201-0000	Special rock embankment 6,000 m3	\$ _____	\$ _____
25205-0000	Rock buttress 800 m3	\$ _____	\$ _____
25302-1000	Gabions, galvanized or aluminized coated 625 m3	\$ _____	\$ _____
25305-1000	Revet mattress, galvanized or aluminized coated 195 m2	\$ _____	\$ _____
25501-1000	Mechanically stabilized earth wall, welded wire face 3,200.0 m2	\$ _____	\$ _____

Bid Schedule

Project: CA PFH 114-1(1)

HYAMPOM ROAD - SCHEDULE A

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
30101-0000	Aggregate base 25,500 t	\$ _____	\$ _____
40301-0500	Hot asphalt concrete pavement, grading E 7,000 t	\$ _____	\$ _____
40305-3000	Antistrip additive, type 3 75 t	\$ _____	\$ _____
40401-0000	Minor hot asphalt concrete 105 t	\$ _____	\$ _____
40920-1000	Fog seal, emulsified asphalt grade CSS-1 or CSS-1h, SS-1 or SS-1h 19.0 t	\$ _____	\$ _____
41101-0000	Prime coat 50.0 t	\$ _____	\$ _____
41105-0000	Blotter 330.0 t	\$ _____	\$ _____
41201-0000	Tack coat 19.0 t	\$ _____	\$ _____
60103-0000	Concrete, headwall 10 Each	\$ _____	\$ _____
60201-0800	600mm pipe culvert 460.0 m	\$ _____	\$ _____
60201-1100	1050mm pipe culvert 70.0 m	\$ _____	\$ _____
60201-1200	1200mm pipe culvert 150.0 m	\$ _____	\$ _____

Bid Schedule

Project: CA PFH 114-1(1)

HYAMPOM ROAD - SCHEDULE A

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
60201-1200	1200mm pipe culvert (with baffles and bulkhead) 12.0 m	\$ _____	\$ _____
60201-1300	1350mm pipe culvert (with baffles and bulkhead) 14.0 m	\$ _____	\$ _____
60201-1400	1500mm pipe culvert (with baffles and bulkhead) 30.0 m	\$ _____	\$ _____
60201-1600	1800mm pipe culvert 75.0 m	\$ _____	\$ _____
60201-1800	2100mm pipe culvert (with baffles and bulkhead) 22.0 m	\$ _____	\$ _____
60210-0800	End section for 600mm pipe culvert 40 Each	\$ _____	\$ _____
60212-0800	Elbow, 600mm 4 Each	\$ _____	\$ _____
60212-1100	Elbow, 1050mm 1 Each	\$ _____	\$ _____
60212-1600	Elbow, 1800mm 2 Each	\$ _____	\$ _____
60230-0000	Debris rack 5 Each	\$ _____	\$ _____
60403-0700	Inlet, Caltrans (Type G0, curb and opening) 35 Each	\$ _____	\$ _____
60501-0000	Standard underdrain system 590 m	\$ _____	\$ _____

Bid Schedule

Project: CA PFH 114-1(1)

HYAMPOM ROAD - SCHEDULE A

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
60522-0000	Sand 165 m3	\$ _____	\$ _____
60602-0700	Pipe anchor assembly, 600mm 22 Each	\$ _____	\$ _____
60602-1000	Pipe anchor assembly, 1050mm 12 Each	\$ _____	\$ _____
60602-1100	Pipe anchor assembly, 1200mm 28 Each	\$ _____	\$ _____
60602-1150	Pipe anchor assembly, 1350mm 4 Each	\$ _____	\$ _____
60602-1200	Pipe anchor assembly, 1500mm 7 Each	\$ _____	\$ _____
60602-1300	Pipe anchor assembly, 1800mm 10 Each	\$ _____	\$ _____
60602-1400	Pipe anchor assembly, 2100mm 5 Each	\$ _____	\$ _____
60901-2500	Curb, asphalt, 200mm depth 5,910 m	\$ _____	\$ _____
60908-1000	Paved ditch, asphalt 7,090 m2	\$ _____	\$ _____
61701-1350	Guardrail system G4, type 2, class B steel posts 2,550.0 m	\$ _____	\$ _____
61702-0000	Terminal section 1 Each	\$ _____	\$ _____

Bid Schedule

Project: CA PFH 114-1(1)

HYAMPOM ROAD - SCHEDULE A

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
61702-0600	Terminal section, type flared 12 Each	\$ _____	\$ _____
61702-0800	Terminal section type tangent 7 Each	\$ _____	\$ _____
62201-0200	Dump truck, 8 cubic meter minimum capacity 80 Hour	\$ _____	\$ _____
62201-0550	Backhoe loader, 180 liter minimum rated capacity bucket, 600mm width 160 Hour	\$ _____	\$ _____
62201-1050	Wheel loader, 5 cubic meter minimum rated capacity 160 Hour	\$ _____	\$ _____
62201-1400	Bulldozer, 200kW minimum flywheel power 160 Hour	\$ _____	\$ _____
62201-3300	Hydraulic excavator, 0.7 cubic meter minimum capacity 160 Hour	\$ _____	\$ _____
62202-1000	Materials transfer vehicle ALL	Lump Sum	\$ _____
62301-0000	General labor 800 Hour	\$ _____	\$ _____
62302-1000	Special labor, hired technical services 160 Hour	\$ _____	\$ _____
62302-1100	Special labor, hired survey services 160 Hour	\$ _____	\$ _____
62403-0000	Furnishing and placing topsoil 1,350 m3	\$ _____	\$ _____
62409-0000	Placing manufactured topsoil 8,000 m3	\$ _____	\$ _____

Bid Schedule

Project: CA PFH 114-1(1)

HYAMPOM ROAD - SCHEDULE A

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
62415-0000	Conserve and place forest duff 230 m3	\$ _____	\$ _____
62510-2000	Seeding, hydraulic method 14.00 ha	\$ _____	\$ _____
62515-2000	Mulching, hydraulic method 14.00 ha	\$ _____	\$ _____
62520-0000	Fertilizer 14.00 ha	\$ _____	\$ _____
62542-1000	Seeding supplements, seed (Wetland mitigation site) 6 kg	\$ _____	\$ _____
62630-0300	Plantings, seedlings, container grown 58 Each	\$ _____	\$ _____
62630-0400	Plantings, wetland plant, container grown 733 Each	\$ _____	\$ _____
62635-3000	Cuttings, willow pole 18 Each	\$ _____	\$ _____
62901-0800	Rolled erosion control product, type 2.D 4,500 m2	\$ _____	\$ _____
62901-1000	Rolled erosion control product, type 3.B 10,700 m2	\$ _____	\$ _____
63302-0000	Sign system 22.00 m2	\$ _____	\$ _____
63308-2000	Object marker, type 2 92 Each	\$ _____	\$ _____

Bid Schedule

Project: CA PFH 114-1(1)

HYAMPOM ROAD - SCHEDULE A

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
63309-0200	Delineator, type 2 60 Each	\$ _____	\$ _____
63401-0300	Pavement markings, type B, solid 51,000 m	\$ _____	\$ _____
63501-2000	Temporary traffic control, traffic signal system ALL	Lump Sum	\$ _____
63502-0600	Temporary traffic control, barricade type 3 4 Each	\$ _____	\$ _____
63502-0700	Temporary traffic control, cone 55 Each	\$ _____	\$ _____
63502-1250	Temporary traffic control, tubular marker, type 1050mm 225 Each	\$ _____	\$ _____
63502-1600	Temporary traffic control, warning light type B 6 Each	\$ _____	\$ _____
63503-0400	Temporary traffic control, concrete barrier 1,000 m	\$ _____	\$ _____
63503-0500	Temporary traffic control, moving concrete barrier 4,950 m	\$ _____	\$ _____
63504-1000	Temporary traffic control, construction sign 110.0 m2	\$ _____	\$ _____
63505-1000	Temporary traffic control, pavement markings 13.60 km	\$ _____	\$ _____
63506-0500	Temporary traffic control, flagger 16,500 Hour	\$ _____	\$ _____
63506-0600	Temporary traffic control, pilot car 5,500 Hour	\$ _____	\$ _____

Bid Schedule

Project: CA PFH 114-1(1)

HYAMPOM ROAD - SCHEDULE A

Pay Item No.	Estimated Quantity	Unit Bid Price	Amount Bid
63507-0400	Temporary traffic control, police officer 30 days	\$ _____	\$ _____
63510-0100	Temporary traffic control, traffic and safety supervisor 130 weeks	\$ _____	\$ _____
65101-1000	Draped rockfall protection, wire mesh 13,000 m2	\$ _____	\$ _____

PART A CONSTRUCTION COST SUBTOTAL \$ _____

Number of Days	Road User/ Administrative Cost	Amount Bid
Calendar Days * _____	\$5,000.00 Per Day	\$ _____

* The number of calendar days used shall include all weekends, holidays, periods of inclement weather, winter shutdown periods, and all other days during which work may or may not be performed.

PART B ROAD USER/ADMINISTRATIVE COST SUBTOTAL \$ _____

SCHEDULE A (TOTAL COST BASIS) (A + B) \$ _____

ALTERNATE BID ITEM 15401-0000,
Contractor Testing, Using Government
Furnished Field Laboratory \$ _____

Submitted by: _____
Name of Bidder

Continuation of Bid Schedule**BUY AMERICAN ACT- CONSTRUCTION MATERIALS
UNDER TRADE AGREEMENTS**

It is understood and agreed that the materials and components listed in Subpart 25.1 of the FAR are a part of this contract and are deemed to be Domestic Construction Material for the purposes of this contract.

NOTE TO CONTRACTOR:

The following information and any applicable supporting data is required for evaluation of requests under FAR Clause 52.225-11 Paragraph (c) & (d) and FAR Provision 52.225-12 Paragraph (b).

Material and/or Component

Construction Material Description	Unit of Measure	Quantity	*Cost Delivered to Job Site
Foreign Construction Material			
Comparable Domestic Material			

Material and/or Component

Construction Material Description	Unit of Measure	Quantity	*Cost Delivered to Job Site
Foreign Construction Material			
Comparable Domestic Material			

[Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]
[Please include name, address, telephone number and contact for suppliers surveyed. Attach copy of response; if oral, attach summary. Include all applicable supporting information.]*

HAZARDOUS MATERIALS

As required by FAR Clause 52.223-3, Hazardous Materials Identification and Safety Data - Alternate I, the apparent low bidder must submit prior to award a Material Safety Data Sheet (MSDS) for all hazardous materials that the bidder identifies in paragraph (b) of the FAR clause and defined under the latest version of Federal Standard No. 313.

Hazardous Material	Identification Number

USE OF RECOVERED MATERIALS ON FEDERAL LANDS HIGHWAY PROJECTS

Use of fly ash and ground granulated blast furnace slag and construction materials containing fly ash and ground granulated blast furnace slag on Federal Lands Highway projects:

- It is the policy of the United States Government that fly ash and ground granulated blast furnace slag and materials containing fly ash and ground granulated blast furnace slag shall have maximum practicable opportunity for incorporation into its construction projects.
- The Contractor agrees to investigate the use of fly ash and ground granulated blast furnace slag and materials containing fly ash and ground granulated blast furnace slag to the fullest extent consistent with the efficient performance of this contract. Both the contractor and the subcontractors are urged to seek out suppliers of fly ash and ground granulated blast furnace slag, cement and concrete containing fly ash and ground granulated blast furnace slag and to solicit bids for these materials.
- Names of firms that supply fly ash and ground granulated blast furnace slag and materials containing fly ash and ground granulated blast furnace slag are available from the American Coal Ash Association and the National Slag Association.

BID BOND (See instructions on reverse)				DATE BOND EXECUTED (Must not be later than bid opening date)				OMB NO. 9000-0045	
Public reporting burden for this collection of information is estimated to average 25 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (MVR), Federal Acquisition Policy Division, GSA, Washington, D.C. 20405.									
PRINCIPAL (Legal name and business address)						TYPE OF ORGANIZATION (X one)			
						<input type="checkbox"/> INDIVIDUAL <input type="checkbox"/> PARTNERSHIP <input type="checkbox"/> JOINT VENTURE <input type="checkbox"/> CORPORATION			
						STATE OF INCORPORATION			
SURETY(IES) (Name and business address)									
PENAL SUM OF BOND					BID IDENTIFICATION				
PERCENT OF BID PRICE	AMOUNT NOT TO EXCEED				BID DATE	INVITATION NO.			
	MILLION(S)	THOUSAND(S)	HUNDRED(S)	CENTS		CA PFH 114-1(1), Hyampom Road			
20 PERCENT					FOR (Construction, Supplies or Services)	CONSTRUCTION			
<p>OBLIGATION:</p> <p>We, the Principal and Surety(ies) are firmly bound to the United States of America (hereinafter called the Government) in the above penal sum. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally. However, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us. For all other purposes, each Surety binds itself, jointly and severally with the Principal, for the payment of the sum shown opposite the name of the Surety. If no limit of liability is indicated, the limit of liability is the full amount of the penal sum.</p> <p>CONDITIONS:</p> <p>The Principal has submitted the bid identified above.</p> <p>THEREFORE:</p> <p>The above obligation is void if the Principal - (a) upon acceptance by the Government of the bid identified above, within the period specified therein for acceptance (sixty (60) days if no period is specified), executes the further contractual documents and gives the bond(s) required by the terms of the bid as accepted within the time specified (ten (10) days if no period is specified) after receipt of the forms by the principal; or (b) in the event of failure to execute such further contractual documents and give such bonds, pays the Government for any cost of procuring the work which exceeds the amount of the bid.</p> <p>Each Surety executing this instrument agrees that its obligation is not impaired by any extension(s) of time for acceptance of the bid that the Principal may grant to the Government. Notice to the surety(ies) of extension(s) are waived. However, waiver of the notice applies only to extensions aggregating not more than sixty (60) calendar days in addition to the period originally allowed for acceptance of the bid.</p> <p>WITNESS:</p> <p>The Principal and Surety(ies) executed this bid bond and affixed their seals on the above date.</p>									
PRINCIPAL									
SIGNATURE(S)	1. (Seal)		2. (Seal)		3. (Seal)		Corporate Seal		
NAMES(S) & TITLE(S) (Typed)	1.		2.		3.				
INDIVIDUAL SURETY(IES)									
SIGNATURE(S)	1. (Seal)				2. (Seal)				
NAME(S) (Typed)	1.				2.				
CORPORATE SURETY(IES)									
SURETY A	NAME & ADDRESS				STATE OF INC.	LIABILITY LIMIT \$		Corporate Seal	
	SIGNATURE(S)	1.			2.				
	NAMES(S) & TITLE(S) (Typed)	1.			2.				

CORPORATE SURETY(IES) (Continued)						
SURETY B	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		
SURETY C	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		
SURETY D	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		
SURETY E	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		
SURETY F	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		
SURETY G	NAME & ADDRESS			STATE OF INC.	LIABILITY LIMIT \$	Corporate Seal
	SIGNATURE(S)	1.		2.		
	NAMES(S) & TITLE(S) (Typed)	1.		2.		

INSTRUCTIONS

1. This form is authorized for use when a bid guaranty is required. Any deviation from this form will require the written approval of the Administrator of General Services.
2. Insert the full legal name and business address of the Principal in the space designated "Principal" on the face of the form. An authorized person shall sign the bond. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
3. The bond may express penal sum as a percentage of the bid price. In these cases, the bond may state a maximum dollar limitation (e.g., 20% of the bid price but the amount not to exceed 3,000,000.00 dollars).
4. (a) Corporations executing the bond as sureties must appear on the Department of the Treasury's list of approved sureties and must act within the limitation listed therein. Where more than one corporate surety is involved, their names and addresses shall appear in the spaces (Surety A, Surety B, etc.) headed "CORPORATE SURETY(IES)." In the space designated "SURETY(IES)" on the face of the form, insert only the letter identification of the sureties.
 (b) Where individual sureties are involved, a completed Affidavit of Individual Surety (Standard Form 28), for each individual surety, shall accompany the bond. The Government may require the surety to furnish additional substantiating information concerning its financial capacity.
5. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Corporate Seal"; and shall affix an adhesive seal if executed in Maine, New Hampshire, or any other jurisdiction requiring adhesive seals.
6. Type the name and title of each person signing this bond in the space provided.
7. In its application to negotiated contracts, the terms "bid" and "bidder" shall include "proposal" and "offeror."

D-1
FEDERAL ACQUISITION REGULATION

SOLICITATION PROVISIONS

REPRESENTATIONS AND CERTIFICATIONS

Effective January 2005, offerors/bidders must submit Representations and Certifications online at www.bpn.gov. All offerors/bidders should submit/update this information at least annually. Refer to the Federal Acquisition Provision 52.204-8 *Annual Representations and Certifications* below. If you have previously accomplished your on-line registration and the NAICS code for this solicitation is different than the code listed in your online profile, please note the amended changes on the lines provided in the Provision below.

REFER TO CFLHD'S WEBSITE AT <http://www.cflhd.gov/procurement/construction/reference-links.cfm> FOR ON-LINE REGISTRATION INSTRUCTIONS

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2006)

- (a) (1) The North American Industry Classification System (NAICS) code for this acquisition is 237310.
(2) The small business size standard is 31.0 million or fewer.
(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

- (b) (1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (c) of this provision applies.

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (c) instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

☐ (i) Paragraph (c) applies.

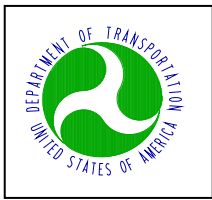
☐ (ii) Paragraph (c) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c) The offeror has completed the annual representations and certifications electronically via the Online Representations and Certifications Application (ORCA) website at <http://orca.bpn.gov>. After reviewing the ORCA database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR CLAUSE	TITLE	DATE	CHANGE
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on ORCA.

(End of Provision)



D-2

FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

BIDDER'S QUALIFICATIONS

INSTRUCTIONS: Answer all questions on this form inserting "none" or "not applicable" where appropriate. If more space is required attach additional sheets. Return the signed, dated and completed form with the bid to the address shown in the invitation for bids on or before the time set for bid opening. The prospective bidder shall provide any additional information requested by the Government during evaluation of the bids.

If the prospective bidder is a joint venture or general partnership, a separate Bidder's Qualifications form shall be provided individually for each joint venture participant or partner.

1. Name and address of business:

Name	DUNS Number (See FAR Provision 52.204-6)*	
Street	Home Office Congressional District (Insert District #) *	
City	State	Zip Code
County		
Telephone Number (Include Area Code)		
Fax Number (Include Area Code)		

* Necessary for Government reporting purposes only
To obtain a Dun & Street number, call
800-333-0505.

2. a. Type of organization (check appropriate box):

<input type="checkbox"/> Individual	<input type="checkbox"/> Non-profit organization	<input type="checkbox"/> Corporation
<input type="checkbox"/> Partnership	<input type="checkbox"/> Joint Venture	<input type="checkbox"/> Incorporated in: _____

If a Foreign entity:

<input type="checkbox"/> Individual	<input type="checkbox"/> Non-profit organization	<input type="checkbox"/> Corporation
<input type="checkbox"/> Partnership	<input type="checkbox"/> Joint Venture	<input type="checkbox"/> Registered in: _____

b. Size and type of Business Concern (check appropriate boxes):

<input type="checkbox"/> Large Business Concern	<input type="checkbox"/> Small Disadvantaged Business Concern	<input type="checkbox"/> Emerging Small Business
<input type="checkbox"/> Small Business Concern	<input type="checkbox"/> Women-Owned Small Business	<input type="checkbox"/> SBA 8(a) Certified
<input type="checkbox"/> HUB Zone Business Concern	<input type="checkbox"/> Veteran Owned Business Concern	<input type="checkbox"/> Service-Disabled Veteran-Owned Business Concern

3. If a joint venture or general partnership:

- a. Provide the name under which the project will be bid, the home office address, and name of the principal who will represent the company with regard to this project if different from "1." above.

Principal

Business Name

Street

City

State

Zip Code

- b. Provide the name and home office addresses of each of the joint venture partners; indicate which partner is the sponsoring partner. Attach a separate sheet for additional partners.

Sponsoring Partner

Other Partner

Street

Street

City

State

Zip Code

City

State

Zip Code

4. Date organization established: _____

5. Name of succeeded business, if any: _____

6. How many years have you been in business as:

- a. General contractor ___ years.
b. Subcontractor ___ years.

7. a. Furnish the following information concerning the owner, partners, officers and directors:

Name	Title	Percent of Business Owned	Years of Business Experience	
			Contracting	Other

- b. Attach resumes of these key personnel as well as the on-site project manager(s) and superintendent(s), and specifically identify the following:

- Present position, responsibility, and length of employment.
- Amount and type of construction experience.
- Amount and type of highway construction experience, including position, responsibility, and a brief project description of each period of employment.
- Formal education and training, professional or technical registrations or licenses.

8. a. Contracts in force. (Attach additional sheets if necessary)

Project Name and Contract Numbers	Owner's Name, Address, and Contact Name and Telephone #	Scope of Work Performed	Contract Amount	Estimated Completion Date	Name of Surety

b. Are there any unresolved claims or lawsuits associated with these projects? If so, state the amount in dispute, parties involved, nature and circumstances of the dispute, and status of the matter on a separate sheet.

9. a. List at least five of the largest jobs you have completed in the last five years which are similar in project work scope to this project. (Attach additional sheets if necessary)

Project Name and Contract Numbers	Owner's Name, Address, Contact Name and Telephone #	Scope of Work Performed	Original and Final Contract Amounts	Original and Final Completion Dates	Names of On-site Project Manager and Superintendent	Name of Surety

b. Are there any unresolved claims or lawsuits associated with these projects? If so, state the amount in dispute, parties involved, nature and circumstances of the dispute, and status of the matter on a separate sheet.

FEDERAL ACQUISITION REGULATION

SOLICITATION PROVISIONS

Instructions to Bidders

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also the full text of a solicitation provision may be accessed electronically at this address:

<http://www.arinet.gov/far/>.

(End of Provision)

- 52.204-5 WOMEN-OWNED BUSINESS OTHER THAN SMALL BUSINESS (MAY 1999)
- 52.211-6 BRAND NAME OR EQUAL (AUG 1999)
- 52.214-3 AMENDMENTS TO INVITATIONS FOR BIDS (DEC 1989)
- 52.214-4 FALSE STATEMENTS IN BIDS (APR 1984)
- 52.214-5 SUBMISSION OF BIDS (MAR 1997)
- 52.214-6 EXPLANATION TO PROSPECTIVE BIDDERS (APR 1984)
- 52.214-7 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS
(NOV 1999)
- 52.214-18 PREPARATION OF BIDS - CONSTRUCTION (APR 1984)
- 52.214-19 CONTRACT AWARD - SEALED BIDDING - CONSTRUCTION (AUG 1996)
- 52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)
- 52.214-35 SUBMISSION OF OFFERS IN U.S. CURRENCY (APR 1991)
- 52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)

**52.211-4 AVAILABILITY FOR EXAMINATION OF SPECIFICATIONS NOT LISTED
IN THE GSA INDEX OF FEDERAL SPECIFICATIONS, STANDARDS AND
COMMERCIAL ITEM DESCRIPTIONS (JUN 1988)**

Specifications cited in this solicitation which are not available for distribution may be examined at the following location:

Federal Highway Administration
Central Federal Lands Highway Division
12300 West Dakota Avenue, Suite 360
Lakewood, Colorado 80228
Contact: Brenda McGehee @ (720) 963-3353 or DD Daly @ (720) 963-3355

(End of Provision)

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a firm-fixed price contract resulting from this solicitation.

(End of Provision)

**52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE
EQUAL EMPLOYMENT OPPORTUNITY (FEB 1999)**

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
6.6%	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on

(1) its implementation of the Equal Opportunity clause,

(2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and

(3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the -

(1) Name, address, and telephone number of the subcontractor;

(2) Employer's identification number of the subcontractor;

(3) Estimated dollar amount of the subcontract;

(4) Estimated starting and completion dates of the subcontract; and

(5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is Trinity County, California.

(End of Provision)

**52.225-12 NOTICE OF BUY AMERICAN ACT REQUIREMENTS-
CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (JAN 2005)**

(a) *Definitions.*

"Construction material," "designated country construction material," "domestic construction material," and "foreign construction material," as used in this provision, are defined in the clause of this solicitation entitled "Buy American Act—Construction Materials Under Trade Agreements" (Federal Acquisition Regulation (FAR) clause 52.225-11).

(b) *Requests for determination of inapplicability.* An offeror requesting a determination regarding the inapplicability of the Buy American Act should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of FAR clause 52.225-11 in the request. If an offeror has not requested a determination

regarding the inapplicability of the Buy American Act before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers.

(1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act, based on claimed unreasonable cost of domestic construction materials, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(4)(i) of FAR clause 52.225-11.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers.

(1) When an offer includes foreign construction material, other than designated country construction material, that is not listed by the Government in this solicitation in paragraph (b)(3) of FAR clause 52.225-11, the offeror also may submit an alternate offer based on use of equivalent domestic or designated country construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of FAR clause 52.225-11 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of FAR clause 52.225-11 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic or designated country construction material, and the offeror shall be required to furnish such domestic or designated country construction material. An offer based on use of the foreign construction material for which an exception was requested—

- (i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or
- (ii) May be accepted if revised during negotiations.

(End of Provision)

52.228-1 BID GUARANTEE (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department

regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.

(c) The amount of the bid guarantee shall be 20 percent of the bid price or \$3,000,000, whichever is less.

(d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.

(e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

(End of Provision)

52.233-2 SERVICE OF PROTEST (SEPT 2006)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

Mr. Kevin R. Black
Contract Development Engineer
Central Federal Lands Highway Division
12300 West Dakota Avenue, Suite 360
Lakewood, Colorado 80228

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of Provision)

52.252-3 ALTERATIONS IN SOLICITATION (APR 1984)

Portions of this solicitation are altered as follows:

None.

(End of Provision)

**1252.216-70 EVALUATION OF OFFERS SUBJECT TO AN ECONOMIC PRICE
ADJUSTMENT CLAUSE (OCT 1994)**

Offers shall be evaluated without an amount for an economic price adjustment being added. Offers will be rejected which: (1) increase the ceiling stipulated; (2) limit the downward adjustment; or (3) delete the economic price adjustment clause. If the offer stipulates a ceiling lower than that included in the solicitation, the lower ceiling will be incorporated into any resulting contract.

(End of Provision)

FEDERAL ACQUISITION REGULATION
CONTRACT CLAUSES
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52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also the full text of a clause may be accessed electronically at this address:

<http://www.arnet.gov/far/>.

(End of Clause)

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**52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK
(APR 1984)--ALTERNATE I (APR 1984)**

The Contractor shall be required to (a) commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than (See Standard Form 1442). The time stated for completion shall include final cleanup of the premises.

The completion date is based on the assumption that the successful offeror will receive the notice to proceed by April 28, 2008. The completion date will be extended by the number of calendar days after the above date that the Contractor receives the notice to proceed, except to the extent that the delay in issuance of the notice to proceed results from the failure of the Contractor to execute the contract and give the required performance and payment bonds within the time specified in the offer.

(End of Clause)

52.211-12 LIQUIDATED DAMAGES - CONSTRUCTION (SEPT 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of (See Subsection 108.04 of the Special Contract Requirements) for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of Clause)

**52.222-39 NOTIFICATION OF EMPLOYEE RIGHTS CONCERNING
PAYMENT OF UNION DUES OR FEES (DEC 2004)**

(a) *Definition.* As used in this clause—

“United States” means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b) Except as provided in paragraph (e) of this clause, during the term of this contract, the Contractor shall post a notice, in the form of a poster, informing employees of their rights concerning union membership and payment of union dues and fees, in conspicuous places in and about all its plants and offices, including all places where notices to employees are customarily posted. The notice shall include the following information (except that the information pertaining to National Labor Relations Board shall not be included in notices posted in the plants or offices of carriers subject to the Railway Labor Act, as amended (45 U.S.C. 151-188)).

Notice to Employees

Under Federal law, employees cannot be required to join a union or maintain membership in a union in order to retain their jobs. Under certain conditions, the law permits a union and an employer to enter into a union-security agreement requiring employees to pay uniform periodic dues and initiation fees. However, employees who are not union members can object to the use of their payments for certain purposes and can only be required to pay their share of union costs relating to collective bargaining, contract administration, and grievance adjustment.

If you do not want to pay that portion of dues or fees used to support activities not related to collective bargaining, contract administration, or grievance adjustment, you are entitled to an appropriate reduction in your payment. If you believe that you have been required to pay dues or fees used in part to support activities not related to collective bargaining, contract administration, or grievance adjustment, you may be entitled to a refund and to an appropriate reduction in future payments.

For further information concerning your rights, you may wish to contact the National Labor Relations Board (NLRB) either at one of its Regional offices or at the following address or toll free number:

National Labor Relations Board
Division of Information
1099 14th Street, N.W.
Washington, DC 20570
1-866-667-6572
1-866-316-6572 (TTY)

To locate the nearest NLRB office, see NLRB's website at <http://www.nlr.gov>.

(c) The Contractor shall comply with all provisions of Executive Order 13201 of February 17, 2001, and related implementing regulations at 29 CFR part 470, and orders of the Secretary of Labor.

(d) In the event that the Contractor does not comply with any of the requirements set forth in paragraphs (b), (c), or (g), the Secretary may direct that this contract be cancelled, terminated, or suspended in whole or in part, and declare the Contractor ineligible for further Government contracts in accordance with procedures at 29 CFR part 470, Subpart B—Compliance Evaluations, Complaint Investigations and Enforcement Procedures. Such other sanctions or remedies may be imposed as are provided by 29 CFR part 470, which implements Executive Order 13201, or as are otherwise provided by law.

(e) The requirement to post the employee notice in paragraph (b) does not apply to—

(1) Contractors and subcontractors that employ fewer than 15 persons;

(2) Contractor establishments or construction work sites where no union has been formally recognized by the Contractor or certified as the exclusive bargaining representative of the Contractor's employees;

(3) Contractor establishments or construction work sites located in a jurisdiction named in the definition of the United States in which the law of that jurisdiction forbids enforcement of union-security agreements;

(4) Contractor facilities where upon the written request of the Contractor, the Department of Labor Deputy Assistant Secretary for Labor-Management Programs has waived the posting requirements with respect to any of the Contractor's facilities if the Deputy Assistant Secretary finds that the Contractor has demonstrated that—

(i) The facility is in all respects separate and distinct from activities of the Contractor related to the performance of a contract; and

(ii) Such a waiver will not interfere with or impede the effectuation of the Executive order;
or

(5) Work outside the United States that does not involve the recruitment or employment of workers within the United States.

(f) The Department of Labor publishes the official employee notice in two variations; one for contractors covered by the Railway Labor Act and a second for all other contractors.

The Contractor shall—

(1) Obtain the required employee notice poster from the Division of Interpretations and Standards, Office of Labor-Management Standards, U.S. Department of Labor, 200 Constitution Avenue, NW, Room N-5605, Washington, DC 20210, or from any field office of the Department's Office of Labor-Management Standards or Office of Federal Contract Compliance Programs;

(2) Download a copy of the poster from the Office of Labor-Management Standards website at [http:// www.olms.dol.gov](http://www.olms.dol.gov); or

(3) Reproduce and use exact duplicate copies of the Department of Labor's official poster.

(g) The Contractor shall include the substance of this clause in every subcontract or purchase order that exceeds the simplified acquisition threshold, entered into in connection with this contract, unless exempted by the Department of Labor Deputy Assistant Secretary for Labor-Management Programs on account of special circumstances in the national interest under authority of 29 CFR 470.3(c). For indefinite quantity subcontracts, the Contractor shall include the substance of this clause if the value of orders in any calendar year of the subcontract is expected to exceed the simplified acquisition threshold. Pursuant to 29 CFR part 470, Subpart B—Compliance Evaluations, Complaint Investigations and Enforcement Procedures, the Secretary of Labor may direct the Contractor to take such action in the enforcement of these regulations, including the imposition of sanctions for noncompliance with respect to any such subcontract or purchase order. If the Contractor becomes involved in litigation with a subcontractor or vendor, or is threatened with such involvement, as a result of such direction, the Contractor may request the United States, through the Secretary of Labor, to enter into such litigation to protect the interests of the United States.

(End of Clause)

52.225-11 Buy American Act—Construction Materials under Trade Agreements (Nov 2006)

(a) *Definitions.* As used in this clause—

“Caribbean Basin country construction material” means a construction material that—

- (1) Is wholly the growth, product, or manufacture of a Caribbean Basin country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a Caribbean Basin country into a new and different construction material distinct from the materials from which it was transformed.

“Component” means an article, material, or supply incorporated directly into a construction material.

“Construction material” means an article, material, or supply brought to the construction site by the Contractor or subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

“Cost of components” means—

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the construction material (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the construction material.

“Designated country” means any of the following countries:

- (1) A World Trade Organization Government Procurement Agreement country (Aruba, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea (Republic of), Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, or United Kingdom);
- (2) A Free Trade Agreement country (Australia, Bahrain, Canada, Chile, El Salvador, Guatemala, Honduras, Mexico, Morocco, Nicaragua, or Singapore);
- (3) A least developed country (Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of Congo, Djibouti, East Timor, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Laos, Lesotho, Madagascar, Malawi, Maldives, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Tanzania, Togo, Tuvalu, Uganda,

Vanuatu, Yemen, or Zambia); or

(4) A Caribbean Basin country (Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Costa Rica, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Montserrat, Netherlands Antilles, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, or Trinidad and Tobago).

“Designated country construction material” means a construction material that is a WTO GPA country construction material, an FTA country construction material, a least developed country construction material, or a Caribbean Basin country construction material.

“Domestic construction material” means—

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

“Foreign construction material” means a construction material other than a domestic construction material.

“Free Trade Agreement country construction material” means a construction material that—

- (1) Is wholly the growth, product, or manufacture of a Free Trade Agreement (FTA) country; or
- or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a FTA country into a new and different construction material distinct from the materials from which it was transformed.

“Least developed country construction material” means a construction material that—

- (1) Is wholly the growth, product, or manufacture of a least developed country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a least developed country into a new and different construction material distinct from the materials from which it was transformed.

“United States” means the 50 States, the District of Columbia, and outlying areas.

“WTO GPA country construction material” means a construction material that—

- (1) Is wholly the growth, product, or manufacture of a WTO GPA country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a WTO GPA country into a new and different construction material distinct from the materials from which it was transformed.

(b) Construction materials.

(1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. In addition, the Contracting Officer has determined that the WTO GPA and Free Trade Agreements (FTAs) apply to this acquisition. Therefore, the Buy American Act restrictions are waived for designated country construction materials.

(2) The Contractor shall use only domestic or designated country construction material in performing this contract, except as provided in paragraphs (b)(3) and (b)(4) of this clause.

(3) The requirement in paragraph (b)(2) of this clause does not apply to the construction materials or components listed by the Government as follows:

1. None

[Contracting Officer to list applicable excepted materials or indicate "none"]

(4) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(3) of this clause if the Government determines that—

- (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent;
- (ii) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or
- (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act.

(1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(4) of this clause shall include adequate information for Government evaluation of the request, including—

- (A) A description of the foreign and domestic construction materials;
- (B) Unit of measure;
- (C) Quantity;
- (D) Price;
- (E) Time of delivery or availability;
- (F) Location of the construction project;
- (G) Name and address of the proposed supplier; and
- (H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(4)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.

(d) *Data*. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction Material Description	Unit of Measure	Quantity	Price (Dollars)*
-----------------------------------	-----------------	----------	------------------

Item 1:

Foreign construction material	_____	_____	_____
-------------------------------	-------	-------	-------

Domestic construction material	_____	_____	_____
--------------------------------	-------	-------	-------

Item 2:

Foreign construction material	_____	_____	_____
-------------------------------	-------	-------	-------

Domestic construction material	_____	_____	_____
--------------------------------	-------	-------	-------

[List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.]

[Include other applicable supporting information.]

[Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).]*

(End of clause)

52.236-4 PHYSICAL DATA (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by ____*____.

(b) Weather conditions: Contact National Weather Service.

(c) Transportation facilities NA.

(d) ____*____.

* See continuation of Standard Form 1442.

(End of Clause)

52.252-4 ALTERATIONS IN CONTRACT (APR 1984)

Portions of this contract are altered as follows: None.

(End of Clause)

General Decision Number: CA080009 02/08/2008 CA9

Superseded General Decision Number: CA20070009

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

Counties: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Marin, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Solano, Sonoma, Sutter, Tehama, Trinity, Yolo and Yuba Counties in California.

BUILDING CONSTRUCTION PROJECTS (excluding Amador County only); DREDGING CONSTRUCTION PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); AND HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	02/08/2008

ASBE0016-001 08/01/2006

AREA 1: ALAMEDA, CONTRA COSTA, LAKE, MARIN, MENDOCINO, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, & SONOMA COUNTIES

AREA 2: ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LASSEN, MADERA, MARIPOSA, MERCED, MODOC, MONO, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN JOAQUIN, SHASTA, SIERRA, SISKIYOU, STANISLAU, SUTTER, TEHEMA, TRINITY, TULARE, TUOLUMNE, YOLO, & YUBA COUNTIES

	Rates	Fringes
Asbestos Workers/Insulator (Includes the application of all insulating materials, Protective Coverings, Coatings, and Finishes to all types of mechanical systems)		
Area 1.....	\$ 41.68	13.55
Area 2.....	\$ 36.28	13.55

ASBE0016-007 05/01/2006

AREA 1: MARIN & NAPA COUNTIES

AREA 2: REMAINING COUNTIES

	Rates	Fringes
Asbestos Removal worker/hazardous material handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not)		
Area 1.....	\$ 26.75	5.42
Area 2.....	\$ 25.36	5.42

BOIL0549-002 10/01/2006

	Rates	Fringes
BOILERMAKER		
(1) Marin, Sacramento, Solano & Sonoma.....	\$ 33.34	20.11
(2) Remaining Counties.....	\$ 33.34	20.11

BRCA0003-001 08/01/2007

	Rates	Fringes
MARBLE FINISHER.....	\$ 27.22	11.67

BRCA0003-004 07/01/2007

AREA 1: ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN,
MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SUTTER,
TEHAMA, YOLO AND YUBA COUNTIES

AREA 2: MARIN, NAPA, SISKIYOU, SOLANO, SONOMA AND TRINITY COUNTIES

	Rates	Fringes
BRICKLAYER		
AREA 1.....	\$ 31.58	14.12
AREA 2.....	\$ 36.58	16.87

SPECIALTY PAY:

- (A) Underground work such as tunnel work, sewer work, manholes, catch basins, sewer pipes and telephone conduit shall be paid \$1.25 per hour above the regular rate. Work in direct contact with raw sewage shall receive \$1.25 per hour in addition to the above.
- (B) Operating a saw or grinder shall receive \$1.25 per hour above the regular rate.
- (C) Guniting nozzle person shall receive \$1.25 per hour above the regular rate.

BRCA0003-008 07/01/2007

	Rates	Fringes
TERRAZZO FINISHER.....	\$ 27.71	9.91
TERRAZZO WORKER/SETTER.....	\$ 36.78	17.22

BRCA0003-010 04/01/2007

	Rates	Fringes
TILE FINISHER		
Area 1.....	\$ 19.99	7.51
Area 2.....	\$ 20.07	9.91
Area 3.....	\$ 20.25	9.78
Area 4.....	\$ 19.74	9.26
Tile Layer		
Area 1.....	\$ 33.91	9.26
Area 2.....	\$ 32.27	10.96
Area 3.....	\$ 36.47	11.01
Area 4.....	\$ 33.31	10.96

AREA 1: Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter, Tehama, Yolo, Yuba

AREA 2: Alpine, Amador

AREA 3: Marin, Napa, Solano, Siskiyou

AREA 4: Sonoma

BRCA0003-014 08/01/2007

	Rates	Fringes
MARBLE MASON.....	\$ 37.82	18.13

CARP0034-001 07/01/2007

	Rates	Fringes
Diver		
Assistant Tender, ROV		
Tender/Technician.....	\$ 32.15	21.915
Diver standby.....	\$ 36.37	21.915
Diver Tender.....	\$ 35.37	21.915
Diver wet.....	\$ 72.74	21.915
Manifold Operator (mixed		
gas).....	\$ 40.37	21.915
Manifold Operator (Standby).	\$ 35.37	21.915

DEPTH PAY (Surface Diving):

050 to 100 ft \$2.00 per foot

101 to 150 ft \$3.00 per foot

151 to 220 ft \$4.00 per foot

SATURATION DIVING:

The standby rate shall apply until saturation starts. The saturation diving rate applies when divers are under pressure continuously until work task and decompression are complete. The diver rate shall be paid for all saturation hours.

DIVING IN ENCLOSURES:

Where it is necessary for Divers to enter pipes or tunnels, or other enclosures where there is no vertical ascent, the following premium shall be paid: Distance traveled from entrance 26 feet to 300 feet: \$1.00 per foot. When it is necessary for a diver to enter any pipe, tunnel or other enclosure less than 48" in height, the premium will be \$1.00 per foot.

WORK IN COMBINATION OF CLASSIFICATIONS:

Employees working in any combination of classifications within the diving crew (except dive supervisor) in a shift are paid in the classification with the highest rate for that shift.

CARP0034-003 07/01/2007

	Rates	Fringes
Piledriver.....	\$ 32.15	21.915

CARP0035-001 08/01/2007

AREA 1: MARIN, NAPA, SOLANO & SONOMA

AREA 2: ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC,
NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER,
TEHAMA, TRINITY, YOLO & YUBA

	Rates	Fringes
Drywall Installers/Lathers:		
Area 1.....	\$ 33.25	18.80
Area 2.....	\$ 26.52	18.80
Drywall Stocker/Scrapper		
Area 1.....	\$ 16.63	12.09
Area 2.....	\$ 13.26	12.09

PROJECTS \$50,000,000 AND OVER (AREA 2 ONLY):

\$3.50 additional per hour for Drywall Installers and Lathers.

\$1.75 additional per hour for Drywall Stockers and Scrappers.

CARP0035-004 07/01/2007

AREA 1: Marin, Napa, Solano, Sonoma Counties

AREA 4: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer,
Plumas, Sacramento, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Yolo, Yuba counties

	Rates	Fringes
Carpenters:		
AREA 1:		
(1) Carpenter.....	\$ 33.25	18.36
(2) Hardwood Floor Layer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 33.40	18.36
(3) Bridge Builder.....	\$ 33.25	18.36
(4) Millwright.....	\$ 33.35	19.95
AREA 4:		
(1) Carpenter.....	\$ 26.02	18.36
(2) Hardwood Floor Layer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector,		

Saw Filer.....	\$ 26.17	18.36
(3) Bridge Builder.....	\$ 33.25	18.36
(4) Millwright.....	\$ 28.52	19.95

 CARP0035-010 07/01/2007

AREA 1: Marin, Napa, Solano & Sonoma Counties

AREA 2: Alpine, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Yolo & Yuba Counties

	Rates	Fringes
Modular Furniture Installer		
Area 1		
Installer I.....	\$ 20.18	12.325
Installer II.....	\$ 16.75	12.325
Lead Installer.....	\$ 23.63	12.825
Master Installer.....	\$ 27.85	12.825
Area 2		
Installer I.....	\$ 16.58	12.325
Installer II.....	\$ 13.81	12.325
Lead Installer.....	\$ 19.38	12.825
Master Installer.....	\$ 22.80	12.825

 ELEC0006-002 12/01/2006

MARIN, NAPA, SOLANO & SONOMA COUNTIES

	Rates	Fringes
Communications System		
Sound & Communication		
Installer.....	\$ 26.72	3%+10.65
Sound & Communication		
Technician.....	\$ 30.42	3%+10.65

SCOPE OF WORK INCLUDES-

SOUND & VOICE TRANSMISSION (Music, Intercom, Nurse Call, Telephone); FIRE ALARM SYSTEMS [excluding fire alarm work when installed in raceways (including wire and cable pulling) and when performed on new or major remodel building projects or jobs], TELEVISION & VIDEO SYSTEMS, SECURITY SYSTEMS, COMMUNICATIONS SYSTEMS that transmit or receive information and/or control systems that are intrinsic to the above.

EXCLUDES-

Excludes all other data systems or multiple systems which include control function or power supply; excludes installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excludes energy management systems.

ELEC0180-001 06/01/2007

NAPA AND SOLANO COUNTIES

	Rates	Fringes
Cable splicer.....	\$ 44.16	3%+15.44
ELECTRICIAN.....	\$ 39.25	3%+15.44

ELEC0340-002 12/01/2007

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, NEVADA, PLACER, PLUMAS, SACRAMENTO, TRINITY, YOLO, YUBA COUNTIES

	Rates	Fringes
Communications System		
Sound & Communications		
Installer.....	\$ 22.98	3%+9.05
Sound & Communications		
Technician.....	\$ 26.43	3%+9.05

SCOPE OF WORK

Includes the installation testing, service and maintenance, of the following systems which utilize the transmission and/or transference of voice, sound, vision and digital for commercial, education, security and entertainment purposes for the following TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call system, radio page, school intercom and sound, burglar alarms, and low voltage master clock systems.

A. SOUND AND VOICE TRANSMISSION/TRANSFERENCE SYSTEMS

Background foreground music Intercom and telephone interconnect systems, Telephone systems, Nurse call systems, Radio page systems, School intercom and sound systems, Burglar alarm systems, Low voltage master clock systems, Multi-media/multiplex systems, Sound and musical entertainment systems, RF systems, Antennas and Wave Guide.

B. FIRE ALARM SYSTEMS

Installation, wire pulling and testing

C. TELEVISION AND VIDEO SYSTEMS Television monitoring and surveillance systems, Video security systems, Video entertainment systems, Video educational systems, Microwave transmission systems, CATV and CCTV

D. SECURITY SYSTEMS Perimeter security systems Vibration sensor systems Card access systems Access control systems Sonar/infrared monitoring equipment

E. COMMUNICATIONS SYSTEMS THAT TRANSMIT OR RECEIVE INFORMATION AND/OR CONTROL SYSTEMS THAT ARE INTRINSIC TO

THE ABOVE LISTED SYSTEMS SCADA (Supervisory Control and Data Acquisition) PCM (Pulse Code Modulation) Inventory Control Systems Digital Data Systems Broadband and Baseband and Carriers Point of Sale Systems VSAT Data Systems Data Communication Systems RF and Remote Control Systems Fiber Optic Data Systems WORK EXCLUDED Raceway systems are not covered (excluding Ladder-Rack for the purpose of the above listed systems). Chases and/or nipples (not to exceed 10 feet) may be installed on open wiring systems. Energy management systems. SCADA (Supervisory Control and Data Acquisition) when not intrinsic to the above listed systems (in the scope). Fire alarm systems when installed in raceways (including wire and cable pulling) shall be performed at the electrician wage rate, when either of the following two (2) conditions apply:

1. The project involves new or major remodel building trades construction.
2. The conductors for the fire alarm system are installed in conduit.

ELEC0340-003 12/01/2007

ALPINE (West of Sierra Mt. Watershed), AMADOR, BUTTE, COLUSA, EL DORADO (West of Sierra Mt. Watershed), GLENN, LASSEN, NEVADA (West of Sierra Mt. Watershed), PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA (West of Sierra Mt. Watershed), SUTTER, TEHAMA, TRINITY, YOLO & YUBA COUNTIES

	Rates	Fringes
ELECTRICIAN		
Remaining area.....	\$ 36.18	3%+10.85
Sierra Army Depot, Herlong..	\$ 45.23	3%+10.85
Tunnel work.....	\$ 37.99	3%+10.85

CABLE SPLICER: Receives 110% of the Electrician basic hourly rate.

ELEC0401-005 04/01/2004

ALPINE (east of the main watershed divide), EL DORADO (east of the main watershed divide), NEVADA (east of the main watershed), PLACER (east of the main watershed divide) and SIERRA (east of the main watershed divide) COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 27.00	9.83

ELEC0551-004 06/01/2007

MARIN AND SONOMA COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 40.48	3%+12.53

ELEC0659-006 01/01/2006

MODOC and SISKIYOU COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 27.95	11.84

ELEC0659-008 02/01/2006

MODOC & SISKIYOU COUNTIES

	Rates	Fringes
Line Construction		
(1) Cable Splicer.....	\$ 38.71	11.00
(2) Lineman, Pole Sprayer, Heavy Line Equipment Man....	\$ 34.56	10.84
(3) Tree Trimmer.....	\$ 20.57	8.74
(4) Line Equipment Man.....	\$ 29.72	8.90
(5) Powdermen, Jackhammermen.....	\$ 25.92	8.76
(6) Groundman.....	\$ 24.19	8.69

ELEC1245-004 06/01/2007

ALL COUNTIES EXCEPT MODOC & SISKIYOU

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer..	\$ 41.02	12.01
(2) Equipment specialist (operates crawler		

tractors, commercial motor
vehicles, backhoes,
trenchers, cranes (50 tons
and below), and overhead
and underground
distribution line
equipment).....
(3) Groundman.....
(4) Powderman.....

\$ 33.24	11.00
\$ 25.42	10.76
\$ 37.16	11.15

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and day after Thanksgiving, Christmas Day

ELEV0008-001 01/01/2006

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 49.005	13.265

FOOTNOTE:

Vacation Pay: 8% with 5 or more years of service, 6% for 6 months to 5 years service.

Paid Holidays: New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Friday after, and Christmas Day.

ENGI0003-008 07/01/2007

	Rates	Fringes
Dredging: (DREDGING: CLAMSHELL & DIPPER DREDGING; HYDRAULIC SUCTION DREDGING:)		
AREA 1:		
(1) Leverman.....	\$ 36.24	20.53
(2) Dredge Dozer; Heavy duty repairman.....	\$ 31.28	20.53
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator.....	\$ 30.16	20.53
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler..	\$ 26.86	20.53
AREA 2:		
(1) Leverman.....	\$ 38.24	20.53
(2) Dredge Dozer; Heavy		

duty repairman.....	\$ 33.28	20.53
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator.....	\$ 32.16	20.53
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler..	\$ 28.86	20.53

AREA DESCRIPTIONS

AREA 1: ALAMEDA,BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2: MODOC COUNTY

THE REMAINGING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part

Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Remainder

Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part

Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part

Area 2: Remainder

FRESNO COUNTY:

Area 1: Remainder

Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part

Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border with Shasta County
Area 2: Remainder

MADERA COUNTY:

Area 1: Except Eastern part
Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Except Eastern part
Area 2: Eastern part

MONTERREY COUNTY

Area 1: Except Southwestern part
Area 2: Southwestern part

NEVADA COUNTY:

Area 1: All but the Northern portion along the border of Sierra County
Area 2: Remainder

PLACER COUNTY:

Area 1: All but the Central portion
Area 2: Remainder

PLUMAS COUNTY:

Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:

Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:

Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:

Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:

Area 1: All but the Northwestern corner
Area 2: Remainder

TEHAMA COUNTY:

Area 1: All but the Western border with Mendocino & Trinity Counties
Area 2: Remainder

TRINITY COUNTY:

Area 1: East Central part and the Northeastern border with Shasta County

Area 2: Remainder

TUOLUMNE COUNTY:

Area 1: Except Eastern part

Area 2: Eastern part

ENGI0003-018 06/25/2007

"AREA 1" WAGE RATES ARE LISTED BELOW

"AREA 2" RECEIVES AN ADDITIONAL \$2.00 PER HOUR ABOVE AREA 1 RATES.

SEE AREA DEFINITIONS BELOW

	Rates	Fringes
POWER EQUIPMENT OPERATOR (AREA 1:)		
GROUP 1.....	\$ 36.09	19.62
GROUP 2.....	\$ 34.56	19.62
GROUP 3.....	\$ 33.08	19.62
GROUP 4.....	\$ 31.70	19.62
GROUP 5.....	\$ 30.43	19.62
GROUP 6.....	\$ 29.11	19.62
GROUP 7.....	\$ 27.97	19.62
GROUP 8.....	\$ 26.83	19.62
GROUP 8-A.....	\$ 24.62	19.62
POWER EQUIPMENT OPERATOR (Cranes and Attachments - AREA 1:)		
GROUP 1		
Cranes.....	\$ 36.97	19.62
Oiler.....	\$ 27.71	19.62
Truck crane oiler.....	\$ 30.00	19.62
GROUP 2		
Cranes.....	\$ 35.21	19.62
Oiler.....	\$ 27.50	19.62
Truck crane oiler.....	\$ 29.74	19.62
GROUP 3		
Cranes.....	\$ 33.47	19.62
Hydraulic.....	\$ 29.11	19.62
Oiler.....	\$ 27.22	19.62
Truck Crane Oiler.....	\$ 29.50	19.62

POWER EQUIPMENT OPERATOR

(Piledriving - AREA 1:)

GROUP 1

Lifting devices.....	\$ 37.31	19.62
Oiler.....	\$ 28.05	19.62
Truck crane oiler.....	\$ 30.33	19.62

GROUP 2

Lifting devices.....	\$ 35.49	19.62
Oiler.....	\$ 27.78	19.62
Truck Crane Oiler.....	\$ 30.08	19.62

GROUP 3

Lifting devices.....	\$ 33.81	19.62
Oiler.....	\$ 27.56	19.62
Truck Crane Oiler.....	\$ 29.79	19.62

GROUP 4.....

\$ 32.04 19.62

GROUP 5.....

\$ 29.40 19.62

GROUP 6.....

\$ 27.17 19.62

POWER EQUIPMENT OPERATOR

(Steel Erection - AREA 1:)

GROUP 1

Cranes.....	\$ 37.94	19.62
Oiler.....	\$ 28.39	19.62
Truck Crane Oiler.....	\$ 30.62	19.62

GROUP 2

Cranes.....	\$ 36.17	19.62
Oiler.....	\$ 28.12	19.62
Truck Crane Oiler.....	\$ 30.40	19.62

GROUP 3

Cranes.....	\$ 34.69	19.62
Hydraulic.....	\$ 29.74	19.62
Oiler.....	\$ 27.90	19.62
Truck Crane Oiler.....	\$ 30.13	19.62

GROUP 4.....

\$ 32.67 19.62

GROUP 5.....

\$ 31.37 19.62

POWER EQUIPMENT OPERATOR

(Tunnel and Underground Work

- AREA 1:)

SHAFTS, STOPES, RAISES:

GROUP 1.....	\$ 32.19	19.62
GROUP 1-A.....	\$ 34.66	19.62
GROUP 2.....	\$ 30.93	19.62
GROUP 3.....	\$ 29.60	19.62
GROUP 4.....	\$ 28.46	19.62
GROUP 5.....	\$ 27.32	19.62

UNDERGROUND:

GROUP 1.....	\$ 32.09	19.62
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GROUP 1-A.....	\$ 34.56	19.62
GROUP 2.....	\$ 30.83	19.62
GROUP 3.....	\$ 29.50	19.62
GROUP 4.....	\$ 28.36	19.62
GROUP 5.....	\$ 27.22	19.62

FOOTNOTE: Work suspended by ropes or cables, or work on a Yo-Yo Cat: \$.60 per hour additional.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Operator of helicopter (when used in erection work); Hydraulic excavator, 7 cu. yds. and over; Power shovels, over 7 cu. yds.

GROUP 2: Highline cableway; Hydraulic excavator, 3-1/2 cu. yds. up to 7 cu. yds.; Licensed construction work boat operator, on site; Power blade operator (finish); Power shovels, over 1 cu. yd. up to and including 7 cu. yds. m.r.c.

GROUP 3: Asphalt milling machine; Cable backhoe; Combination backhoe and loader over 3/4 cu. yds.; Continuous flight tie back machine assistant to engineer or mechanic; Crane mounted continuous flight tie back machine, tonnage to apply; Crane mounted drill attachment, tonnage to apply; Dozer, slope brd; Gradall; Hydraulic excavator, up to 3 1/2 cu. yds.; Loader 4 cu. yds. and over; Long reach excavator; Multiple engine scraper (when used as push pull); Power shovels, up to and including 1 cu. yd.; Pre-stress wire wrapping machine; Side boom cat, 572 or larger; Track loader 4 cu. yds. and over; Wheel excavator (up to and including 750 cu. yds. per hour)

GROUP 4: Asphalt plant engineer/box person; Chicago boom; Combination backhoe and loader up to and including 3/4 cu. yd.; Concrete batch plant (wet or dry); Dozer and/or push cat; Pull- type elevating loader; Gradesetter, grade checker (GPS, mechanical or otherwise); Grooving and grinding machine; Heading shield operator; Heavy-duty drilling equipment, Hughes, LDH, Watson 3000 or similar; Heavy-duty repairperson and/or welder; Lime spreader; Loader under 4 cu. yds.; Lubrication and service engineer (mobile and grease rack); Mechanical finishers or spreader machine (asphalt, Barber-Greene and similar); Miller Formless M-9000 slope paver or similar; Portable crushing and screening plants; Power blade support; Roller operator, asphalt; Rubber-tired scraper, self-loading (paddle-wheels, etc.); Rubber- tired earthmoving equipment (scrapers); Slip form paver (concrete); Small tractor with drag; Soil stabilizer (P & H or equal); Spider plow and spider puller; Tubex pile rig; Unlicensed construction work boat operator, on site; Timber skidder; Track loader up to 4 yds.; Tractor-drawn scraper; Tractor, compressor drill combination; Welder; Woods-Mixer (and other similar Pugmill equipment)

GROUP 5: Cast-in-place pipe laying machine; Combination slusher and motor operator; Concrete conveyor or concrete pump, truck or equipment mounted; Concrete conveyor, building site; Concrete pump or pumpcrete gun; Drilling equipment, Watson 2000, Texoma 700 or similar; Drilling and boring machinery, horizontal (not to apply to waterliners, wagon drills or jackhammers); Concrete mixer/all; Person and/or material hoist; Mechanical finishers (concrete)

(Clary, Johnson, Bidwell Bridge Deck or similar types); Mechanical burm, curb and/or curb and gutter machine, concrete or asphalt); Mine or shaft hoist; Portable crusher; Power jumbo operator (setting slip-forms, etc., in tunnels); Screed (automatic or manual); Self-propelled compactor with dozer; Tractor with boom D6 or smaller; Trenching machine, maximum digging capacity over 5 ft. depth; Vermeer T-600B rock cutter or similar

GROUP 6: Armor-Coater (or similar); Ballast jack tamper; Boom- type backfilling machine; Assistant plant engineer; Bridge and/or gantry crane; Chemical grouting machine, truck-mounted; Chip spreading machine operator; Concrete saw (self-propelled unit on streets, highways, airports and canals); Deck engineer; Drilling equipment Texoma 600, Hughes 200 Series or similar up to and including 30 ft. m.r.c.; Drill doctor; Helicopter radio operator; Hydro-hammer or similar; Line master; Skidsteer loader, Bobcat larger than 743 series or similar (with attachments); Locomotive; Lull hi-lift or similar; Oiler, truck mounted equipment; Pavement breaker, truck-mounted, with compressor combination; Paving fabric installation and/or laying machine; Pipe bending machine (pipelines only); Pipe wrapping machine (tractor propelled and supported); Screed (except asphaltic concrete paving); Self- propelled pipeline wrapping machine; Soils & materials tester; Tractor; Self-loading chipper; Concrete barrier moving machine

GROUP 7: Ballast regulator; Boom truck or dual-purpose A-frame truck, non-rotating - under 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) - under 15 tons; Cary lift or similar; Combination slurry mixer and/or cleaner; Drilling equipment, 20 ft. and under m.r.c.; Firetender (hot plant); Grouting machine operator; Highline cableway signalperson; Stationary belt loader (Kolman or similar); Lift slab machine (Vagtborg and similar types); Maginnes internal full slab vibrator; Material hoist (1 drum); Mechanical trench shield; Pavement breaker with or without compressor combination); Pipe cleaning machine (tractor propelled and supported); Post driver; Roller (except asphalt); Chip Seal; Self-propelled automatically applied concrete curing machine (on streets, highways, airports and canals); Self-propelled compactor (without dozer); Signalperson; Slip-form pumps (lifting device for concrete forms); Tie spacer; Tower mobile; Trenching machine, maximum digging capacity up to and including 5 ft. depth; Truck- type loader

GROUP 8: Bit sharpener; Boiler tender; Box operator; Brakeperson; Combination mixer and compressor (shotcrete/gunite); Compressor operator; Deckhand; Fire tender; Forklift (under 20 ft.); Generator; Gunite/shotcrete equipment operator; Hydraulic monitor; Ken seal machine (or similar); Mixermobile; Oiler; Pump operator; Refrigeration plant; Reservoir-debris tug (self-propelled floating); Ross Carrier (construction site); Rotomist operator; Self-propelled tape machine; Shuttlecar; Self-propelled power sweeper operator (includes vacuum sweeper); Slusher operator; Surface heater; Switchperson; Tar pot firetender; Tugger hoist, single drum; Vacuum cooling plant; Welding machine (powered other than by electricity)

GROUP 8-A: Elevator operator; Skidsteer loader-Bobcat 743 series or smaller, and similar (without attachments); Mini excavator under 25 H.P. (backhoe-trencher); Tub grinder wood chipper

ALL CRANES AND ATTACHMENTS

GROUP 1: Clamshell and dragline over 7 cu. yds.; Crane, over 100 tons; Derrick, over 100 tons; Derrick barge pedestal-mounted, over 100 tons; Self-propelled boom-type lifting device, over 100 tons

GROUP 2: Clamshell and dragline over 1 cu. yd. up to and including 7 cu. yds.; Crane, over 45 tons up to and including 100 tons; Derrick barge, 100 tons and under; Self-propelled boom-type lifting device, over 45 tons; Tower crane

GROUP 3: Clamshell and dragline up to and including 1 cu. yd.; Cranes 45 tons and under; Self-propelled boom-type lifting device 45 tons and under; Boom Truck or dual purpose A-frame truck, non-rotating over 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) over 15 tons;

PILEDRIVERS

GROUP 1: Derrick barge pedestal mounted over 100 tons; Clamshell over 7 cu. yds.; Self-propelled boom-type lifting device over 100 tons; Truck crane or crawler, land or barge mounted over 100 tons

GROUP 2: Derrick barge pedestal mounted 45 tons to and including 100 tons; Clamshell up to and including 7 cu. yds.; Self-propelled boom-type lifting device over 45 tons; Truck crane or crawler, land or barge mounted, over 45 tons up to and including 100 tons; Fundex F-12 hydraulic pile rig

GROUP 3: Derrick barge pedestal mounted under 45 tons; Self-propelled boom-type lifting device 45 tons and under; Skid/scow piledriver, any tonnage; Truck crane or crawler, land or barge mounted 45 tons and under

GROUP 4: Assistant operator in lieu of assistant to engineer; Forklift, 10 tons and over; Heavy-duty repairperson/welder

GROUP 5: Deck engineer

GROUP 6: Deckhand; Fire tender

STEEL ERECTORS

GROUP 1: Crane over 100 tons; Derrick over 100 tons; Self-propelled boom-type lifting device over 100 tons

GROUP 2: Crane over 45 tons to 100 tons; Derrick under 100 tons; Self-propelled boom-type lifting device over 45 tons to 100 tons; Tower crane

GROUP 3: Crane, 45 tons and under; Self-propelled boom-type lifting device, 45 tons and under

GROUP 4: Chicago boom; Forklift, 10 tons and over; Heavy-duty repair person/welder

GROUP 5: Boom cat

TUNNEL AND UNDERGROUND WORK

GROUP 1-A: Tunnel bore machine operator, 20' diameter or more

GROUP 1: Heading shield operator; Heavy-duty repairperson; Mucking machine (rubber tired, rail or track type); Raised bore operator (tunnels); Tunnel mole bore operator

GROUP 2: Combination slusher and motor operator; Concrete pump or pumpcrete gun; Power jumbo operator

GROUP 3: Drill doctor; Mine or shaft hoist

GROUP 4: Combination slurry mixer cleaner; Grouting Machine operator; Motorman

GROUP 5: Bit Sharpener; Brakeman; Combination mixer and compressor (gunite); Compressor operator; Oiler; Pump operator; Slusher operator

AREA DESCRIPTIONS:

POWER EQUIPMENT OPERATORS, CRANES AND ATTACHMENTS, TUNNEL AND UNDERGROUND [These areas do not apply to Piledrivers and Steel Erectors]

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part

Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Except Eastern part

Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part

Area 2: Remainder

DEL NORTE COUNTY:

Area 1: Extreme Southwestern corner

Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part

Area 2: Remainder

FRESNO COUNTY

Area 1: Except Eastern part

Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part

Area 2: Remainder

HUMBOLDT COUNTY:

Area 1: Except Eastern and Southwestern parts

Area 2: Remainder

LAKE COUNTY:

Area 1: Southern part

Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border with Shasta County

Area 2: Remainder

MADERA COUNTY

Area 1: Remainder

Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Remainder

Area 2: Eastern part

MENDOCINO COUNTY:

Area 1: Central and Southeastern parts

Area 2: Remainder

MONTEREY COUNTY

Area 1: Remainder

Area 2: Southwestern part

NEVADA COUNTY:

Area 1: All but the Northern portion along the border of Sierra County

Area 2: Remainder

PLACER COUNTY:

Area 1: All but the Central portion

Area 2: Remainder

PLUMAS COUNTY:

Area 1: Western portion

Area 2: Remainder

SHASTA COUNTY:

Area 1: All but the Northeastern corner

Area 2: Remainder

SIERRA COUNTY:

Area 1: Western part

Area 2: Remainder

SISKIYOU COUNTY:

Area 1: Central part

Area 2: Remainder

SONOMA COUNTY:

Area 1: All but the Northwestern corner

Area 2: Remainder

TEHAMA COUNTY:

Area 1: All but the Western border with Mendocino & Trinity Counties

Area 2: Remainder

TRINITY COUNTY:

Area 1: East Central part and the Northeast border with Shasta County

Area 2: Remainder

TULARE COUNTY;
 Area 1: Remainder
 Area 2: Eastern part

TUOLUMNE COUNTY:
 Area 1: Remainder
 Area 2: Eastern Part

 ENGI0003-019 06/25/2007

SEE AREA DESCRIPTIONS BELOW

	Rates	Fringes
POWER EQUIPMENT OPERATOR (LANDSCAPE WORK ONLY)		
GROUP 1		
AREA 1.....	\$ 27.81	18.91
AREA 2.....	\$ 29.81	18.91
GROUP 2		
AREA 1.....	\$ 24.21	18.91
AREA 2.....	\$ 26.21	18.91
GROUP 3		
AREA 1.....	\$ 19.60	18.91
AREA 2.....	\$ 21.60	18.91

GROUP DESCRIPTIONS:

GROUP 1: Landscape Finish Grade Operator: All finish grade work regardless of equipment used, and all equipment with a rating more than 65 HP.

GROUP 2: Landscape Operator up to 65 HP: All equipment with a manufacturer's rating of 65 HP or less except equipment covered by Group 1 or Group 3. The following equipment shall be included except when used for finish work as long as manufacturer's rating is 65 HP or less: A-Frame and Winch Truck, Backhoe, Forklift, Hydragraphic Seeder Machine, Roller, Rubber-Tired and Track Earthmoving Equipment, Skiploader, Straw Blowers, and Trencher 31 HP up to 65 HP.

GROUP 3: Landscae Utility Operator: Small Rubber-Tired Tractor, Trencher Under 31 HP.

AREA DESCRIPTIONS:

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part

Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Except Eastern part

Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part

Area 2: Remainder

DEL NORTE COUNTY:

Area 1: Extreme Southwestern corner

Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part

Area 2: Remainder

FRESNO COUNTY

Area 1: Except Eastern part

Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part

Area 2: Remainder

HUMBOLDT COUNTY:

Area 1: Except Eastern and Southwestern parts

Area 2: Remainder

LAKE COUNTY:

Area 1: Southern part

Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border with Shasta County

Area 2: Remainder

MADERA COUNTY

Area 1: Remainder

Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Remainder

Area 2: Eastern part

MENDOCINO COUNTY:

Area 1: Central and Southeastern parts

Area 2: Remainder

MONTEREY COUNTY

Area 1: Remainder

Area 2: Southwestern part

NEVADA COUNTY:

Area 1: All but the Northern portion along the border of Sierra County

Area 2: Remainder

PLACER COUNTY:

Area 1: All but the Central portion

Area 2: Remainder

PLUMAS COUNTY:

Area 1: Western portion

Area 2: Remainder

SHASTA COUNTY:

Area 1: All but the Northeastern corner

Area 2: Remainder

SIERRA COUNTY:

Area 1: Western part

Area 2: Remainder

SISKIYOU COUNTY:

Area 1: Central part

Area 2: Remainder

SONOMA COUNTY:

Area 1: All but the Northwestern corner

Area 2: Remainder

TEHAMA COUNTY:

Area 1: All but the Western border with Mendocino & Trinity Counties

Area 2: Remainder

TRINITY COUNTY:

Area 1: East Central part and the Northeaster border with Shasta County

Area 2: Remainder

TULARE COUNTY;

Area 1: Remainder

Area 2: Eastern part

TUOLUMNE COUNTY:

Area 1: Remainder

Area 2: Eastern Part

IRON0002-004 07/01/2007

	Rates	Fringes
Ironworkers:		
Fence Erector.....	\$ 29.62	20.915
Ornamental, Reinforcing and Structural.....	\$ 30.51	20.915

PREMIUM PAY:

\$3.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland, Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Seale, Vandenberg AFB

\$2.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

\$1.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0067-002 06/25/2007

AREA "A" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO
AND SANTA CLARA COUNTIES

AREA "B" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LAKE, LASSEN, MADERA, MARIPOSA, MENDOCINO, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, SUTTER, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YUBA COUNTIES

	Rates	Fringes
Asbestos Removal Laborer		
Areas A & B.....	\$ 16.75	5.93
LABORER (Lead Removal)		
Area A.....	\$ 32.38	6.03
Area B.....	\$ 31.38	6.03

ASBESTOS REMOVAL-SCOPE OF WORK: Site mobilization; initial site clean-up; site preparation; removal of asbestos-containing materials from walls and ceilings; or from pipes, boilers and mechanical systems only if they are being scrapped; encapsulation, enclosure and disposal of asbestos-containing materials by hand or with equipment or machinery; scaffolding; fabrication of temporary wooden barriers; and assembly of decontamination stations.

LABO0067-003 07/01/2007

AREA A: ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO & SANTA CLARA

AREA B: ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LAKE, LASSEN, MADERA, MARIPOSA, MENOCINO, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SANCRCMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SIERRA, SHASTA, SISKIYOU, SOLANO, SONOMA, STANISLAUS,TEHAMA,TRINITY, TULARE, TUOLUMNE, YOLO & YUBA COUNTIES

	Rates	Fringes
LABORER (TRAFFIC CONTROL/LANE CLOSURE)		
Escort Driver, Flag Person		
Area A.....	\$ 24.89	13.28
Area B.....	\$ 23.89	13.28
Traffic Control Person I		
Area A.....	\$ 25.19	13.28
Area B.....	\$ 24.19	13.28
Traffic Control Person II		
Area A.....	\$ 22.69	13.28

Area B..... \$ 21.69 13.28

TRAFFIC CONTROL PERSON I: Layout of traffic control, crash cushions, construction area and roadside signage.

TRAFFIC CONTROL PERSON II: Installation and removal of temporary/permanent signs, markers, delineators and crash cushions.

LABO0067-006 06/25/2007

AREA "A" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES

AREA "B" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, EL DORADO, FRESNO, GLENN, KINGS, LASSEN, MADERA, MARIPOSA, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, SUTTER, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YUBA COUNTIES

	Rates	Fringes
Laborers: (CONSTRUCTION CRAFT		
LABORERS - AREA A:)		
Construction Specialist		
Group.....	\$ 25.84	13.28
GROUP 1.....	\$ 25.14	13.28
GROUP 1-a.....	\$ 25.36	13.28
GROUP 1-c.....	\$ 25.19	13.28
GROUP 1-e.....	\$ 25.69	13.28
GROUP 1-f.....	\$ 25.72	13.28
GROUP 1-g (Contra Costa		
County).....	\$ 25.34	13.28
GROUP 2.....	\$ 24.99	13.28
GROUP 3.....	\$ 24.89	13.28
GROUP 4.....	\$ 18.58	13.28

See groups 1-b and 1-d under laborer classifications.

Laborers: (CONSTRUCTION CRAFT

LABORERS - AREA B:)

Construction Specialist		
Group.....	\$ 24.84	13.28
GROUP 1.....	\$ 24.14	13.28
GROUP 1-a.....	\$ 24.36	13.28
GROUP 1-c.....	\$ 24.19	13.28
GROUP 1-e.....	\$ 24.69	13.28
GROUP 1-f.....	\$ 24.72	13.28

GROUP 2.....	\$ 23.99	13.28
GROUP 3.....	\$ 23.89	13.28
GROUP 4.....	\$ 17.58	13.28
See groups 1-b and 1-d under laborer classifications.		
Laborers: (GUNITE - AREA A:)		
GROUP 1.....	\$ 26.10	13.28
GROUP 2.....	\$ 25.60	13.28
GROUP 3.....	\$ 25.01	13.28
GROUP 4.....	\$ 24.89	13.28
Laborers: (GUNITE - AREA B:)		
GROUP 1.....	\$ 25.10	13.28
GROUP 2.....	\$ 24.60	13.28
GROUP 3.....	\$ 24.01	13.28
GROUP 4.....	\$ 23.89	13.28
Laborers: (WRECKING - AREA A:)		
GROUP 1.....	\$ 25.14	13.28
GROUP 2.....	\$ 24.99	13.28
GROUP 3.....	\$ 18.58	13.28
Laborers: (WRECKING - AREA B:)		
GROUP 1.....	\$ 24.14	13.28
GROUP 2.....	\$ 23.99	13.28
GROUP 3.....	\$ 17.58	13.28
Landscape Laborer (GARDENERS, HORTICULTURAL & LANDSCAPE LABORERS - AREA A:)		
(1) New Construction.....	\$ 24.89	13.28
(2) Establishment Warranty Period.....	\$ 18.58	13.28
Landscape Laborer (GARDENERS, HORTICULTURAL & LANDSCAPE LABORERS - AREA B:)		
(1) New Construction.....	\$ 23.89	12.33
(2) Establishment Warranty Period.....	\$ 17.58	12.33

FOOTNOTES:

Laborers working off or with or from bos'n chairs, swinging scaffolds, belts shall receive \$0.25 per hour above the applicable wage rate. This shall not apply to workers entitled to receive the wage rate set forth in Group 1-a below.

LABORER CLASSIFICATIONS

CONSTRUCTION SPECIALIST GROUP: Asphalt ironer and raker; Chainsaw; Laser beam in connection with laborers' work; Cast-in- place manhole form setter; Pressure pipelayer; Davis trencher - 300 or similar type (and all small trenchers); Blaster; Diamond driller; Multiple unit drill; Hydraulic drill

GROUP 1: Asphalt spreader boxes (all types); Barko, Wacker and similar type tampers; Buggymobile; Caulker, bander, pipewrapper, conduit layer, plastic pipelayer; Certified hazardous waste worker including Leade Abatement; Compactors of all types; Concrete and magnesite mixer, 1/2 yd. and under; Concrete pan work; Concrete sander; Concrete saw; Cribber and/or shoring; Cut granite curb setter; Dri-pak-it machine; Faller, logloader and buckler; Form raiser, slip forms; Green cutter; Headerboard, Hubsetter, aligner, by any method; High pressure blow pipe (1-1/2" or over, 100 lbs. pressure/over); Hydro seeder and similar type; Jackhammer operator; Jacking of pipe over 12 inches; Jackson and similar type compactor; Kettle tender, pot and worker applying asphalt, lay-kold, creosote, lime, caustic and similar type materials (applying means applying, dipping or handling of such materials); Lagging, sheeting, whaling, bracing, trenchjacking, lagging hammer; Magnesite, epoxyresin, fiberglass, mastic worker (wet or dry); No joint pipe and stripping of same, including repair of voids; Pavement breaker and spader, including tool grinder; Perma curb; Pipelayer (including grade checking in connection with pipelaying); Precast-manhole setter; Pressure pipe tester; Post hole digger, air, gas and electric; Power broom sweeper; Power tampers of all types (except as shown in Group 2); Ram set gun and stud gun; Riprap stonepaver and rock-slinger, including placing of sacked concrete and/or sand (wet or dry) and gabions and similar type; Rotary scarifier or multiple head concrete chipping scarifier; Roto and Ditch Witch; Rototiller; Sandblaster, pot, gun, nozzle operators; Signalling and rigging; Tank cleaner; Tree climber; Turbo blaster; Vibrascreed, bull float in connection with laborers' work; Vibrator; Hazardous waste worker (lead removal); Asbestos and mold removal worker

GROUP 1-a: Joy drill model TWM-2A; Gardner-Denver model DH143 and similar type drills; Track driller; Jack leg driller; Wagon driller; Mechanical drillers, all types regardless of type or method of power; Mechanical pipe layers, all types regardless of type or method of power; Blaster and powder; All work of loading, placing and blasting of all powder and explosives of whatever type regardless of method used for such loading and placing; High scalers (including drilling of same); Tree topper; Bit grinder

GROUP 1-b: Sewer cleaners shall receive \$4.00 per day above Group 1 wage rates. "Sewer cleaner" means any worker who handles or comes in contact with raw sewage in small diameter sewers. Those who work inside recently active, large diameter sewers, and all recently active sewer manholes shall receive \$5.00 per day above Group 1 wage rates.

GROUP 1-c: Burning and welding in connection with laborers' work; Synthetic thermoplastics and similar type welding

GROUP 1-d: Maintenance and repair track and road beds. All employees performing work covered herein shall receive \$.25 per hour above their regular rate for all work performed on underground structures not specifically covered herein. This paragraph shall not be construed to

apply to work below ground level in open cut. It shall apply to cut and cover work of subway construction after the temporary cover has been placed.

GROUP 1-e: Work on and/or in bell hole footings and shafts thereof, and work on and in deep footings. (A deep footing is a hole 15 feet or more in depth.) In the event the depth of the footing is unknown at the commencement of excavation, and the final depth exceeds 15 feet, the deep footing wage rate would apply to all employees for each and every day worked on or in the excavation of the footing from the date of inception.

GROUP 1-f: Wire winding machine in connection with guniting or shot crete

GROUP 1-g, CONTRA COSTA COUNTY: Pipelayer (including grade checking in connection with pipelaying); Caulker; Bander; Pipewrapper; Conduit layer; Plastic pipe layer; Pressure pipe tester; No joint pipe and stripping of same, including repair of voids; Precast manhole setters, cast in place manhole form setters

GROUP 2: Asphalt shoveler; Cement dumper and handling dry cement or gypsum; Choke-setter and rigger (clearing work); Concrete bucket dumper and chute; Concrete chipping and grinding; Concrete laborer (wet or dry); Driller tender, chuck tender, nipper; Guinea chaser (stake), grout crew; High pressure nozzle, adductor; Hydraulic monitor (over 100 lbs. pressure); Loading and unloading, carrying and hauling of all rods and materials for use in reinforcing concrete construction; Pittsburgh chipper and similar type brush shredders; Sloper; Single foot, hand-held, pneumatic tamper; All pneumatic, air, gas and electric tools not listed in Groups 1 through 1-f; Jacking of pipe - under 12 inches

GROUP 3: Construction laborers, including bridge and general laborer; Dump, load spotter; Flag person; Fire watcher; Fence erector; Guardrail erector; Gardener, horticultural and landscape laborer; Jetting; Limber, brush loader and piler; Pavement marker (button setter); Maintenance, repair track and road beds; Streetcar and railroad construction track laborer; Temporary air and water lines, Victaulic or similar; Tool room attendant (jobsite only)

GROUP 4: Final clean-up work of debris, grounds and building including but not limited to: street cleaner; cleaning and washing windows; brick cleaner (jobsite only); material cleaner (jobsite only). The classification "material cleaner" is to be utilized under the following conditions:

A: at demolition site for the salvage of the material.

B: at the conclusion of a job where the material is to be salvaged and stocked to be reused on another job.

C: for the cleaning of salvage material at the jobsite or temporary jobsite yard.

The material cleaner classification should not be used in the performance of "form stripping, cleaning and oiling and moving to the next point of erection".

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Structural nozzle operator

GROUP 2: Nozzle operator (including gun, pot); Ground person

GROUP 3: Rebound

GROUP 4: Guniting laborer

WRECKING WORK LABORER CLASSIFICATIONS

GROUP 1: Skilled wrecker (removing and salvaging of sash, windows and materials)

GROUP 2: Semi-skilled wrecker (salvaging of other building materials)

GROUP 3: General laborer (includes all clean-up work, loading lumber, loading and burning of debris)

LABO0067-010 06/25/2007

	Rates	Fringes
Tunnel and Shaft Laborers:		
GROUP 1.....	\$ 30.50	13.28
GROUP 2.....	\$ 30.27	13.28
GROUP 3.....	\$ 30.02	13.28
GROUP 4.....	\$ 30.02	13.28
GROUP 5.....	\$ 29.57	13.28
GROUP 6.....	\$ 29.03	13.28

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Guniting and shotcrete nozzlemen

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Guniting & shotcrete gunman & potman; Headermen; High pressure nozzleman; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzleman on slick line; Sandblaster - potman

GROUP 4: Steel form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 5: Vibrator operator, pavement breaker; Bull gang - muckers, trackmen; Concrete crew - includes rodding and spreading

GROUP 6: Dumpmen (any method); Grout crew; Reboundman; Swamper/ Brakeman

LABO0073-001 07/01/2007

	Rates	Fringes
Plasterer tender.....	\$ 26.17	12.68

LABO0139-002 07/01/2007

NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
LABORER: Mason Tender (Brick)...	\$ 25.18	13.27

LABO0185-002 07/01/2007

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
LABORER: Mason Tender (Brick)...	\$ 24.63	13.27

LABO0291-001 07/01/2007

MARIN COUNTY

	Rates	Fringes
Brick Tender.....	\$ 26.18	13.27

PAIN0016-004 07/01/2006

MARIN, NAPA, SOLANO & SONOMA COUNTIES

	Rates	Fringes
Painters:.....	\$ 30.91	14.16

PREMIUMS:

EXOTIC MATERIALS - \$0.75 additional per hour.

SPRAY WORK: - \$0.50 additional per hour.

INDUSTRIAL PAINTING - \$0.25 additional per hour

[Work on industrial buildings used for the manufacture and processing of goods for sale or service; steel construction (bridges), stacks, towers, tanks, and similar structures]

HIGH WORK:

over 50 feet - \$2.00 per hour additional

100 to 180 feet - \$4.00 per hour additional

Over 180 feet - \$6.00 per hour additional

PAIN0016-005 08/01/2007

ALPINE, BUTTE, COLUSA, EL DORADO (west of the Sierra Nevada Mountains), GLENN, LASSEN (west of Hwy. 395, excluding Honey Lake); MARIN, MODOC, NAPA, NEVADA (west of the Sierra Nevada Mountains), PLACER (west of the Sierra Nevada Mountains), PLUMAS, SACRAMENTO, SHASTA, SIERRA (west of the Sierra Nevada Mountains), SISKIYOU, SOLANO, SONOMA, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
DRYWALL FINISHER/TAPER.....	\$ 32.24	12.67

PAIN0016-007 09/01/2007

ALPINE, AMADOR, BUTTE, COLUSA. EL DORADO (west of the Sierra Nevada Mountains), GLENN, LASSEN (west of Highway 395, excluding Honey Lake), MODOC, NEVADA (west of the Sierra Nevada Mountains), PLACER (west of the Sierra Nevada Mountains), PLUMAS, SACRAMENTO, SHASTA, SIERRA (west of the Sierra Nevada Mountains), SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO & YUBA COUNTIES

	Rates	Fringes
Painters:.....	\$ 28.13	12.00

SPRAY/SANDBLAST: \$0.50 additional per hour.

EXOTIC MATERIALS: \$1.00 additional per hour.

HIGH TIME: Over 50 ft above ground or water level \$2.00 additional per hour. 100 to 180 ft above ground or water level \$4.00 additional per hour. Over 180 ft above ground or water level \$6.00 additional per hour.

PAIN0016-008 01/01/2008

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 39.16	14.12

PAIN0169-004 01/01/2008

MARIN , NAPA & SONOMA COUNTIES; SOLANO COUNTY (west of a line defined as follows: Hwy. 80 corridor beginning at the City of Fairfield, including Travis Air Force Base and Suisun City; going north of Manakas Corner Rd., continue north on Suisun Valley Rd. to the Napa County line; Hwy. 80 corridor south on Grizzly Island Rd. to the Grizzly Island Management area)

	Rates	Fringes
GLAZIER.....	\$ 36.86	16.61

* PAIN0567-001 07/01/2007

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
Painters:		
Brush and Roller.....	\$ 23.44	7.80

PREMIUMS:

Special Coatings (Brush), and Sandblasting = \$0.50/hr

Special Coatings (Spray), and Steeplejack = \$1.00/hr

Special Coating Spray Steel = \$1.25/hr

Swing Stage = \$2.00/hr

*A special coating is a coating that requires the mixing of 2 or more products.

PAIN0567-007 01/01/2008

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains) AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 24.25	8.60

PAIN0567-010 07/01/2007

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
Drywall		
(1) Taper.....	\$ 24.69	7.80
(2) Steeplejack - Taper, over 40 ft with open space below.....	\$ 26.19	7.80

PAIN0767-004 01/01/2008

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO (Remainder), SUTTER, TEHAMA, TRINITY, YOLO, YUBA

	Rates	Fringes
GLAZIER.....	\$ 31.02	15.25

PAID HOLIDAYS: New Year's Day, Martin Luther King, Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day.

Employee required to wear a body harness shall receive \$1.50 per hour above the basic hourly rate at any elevation.

PAIN1176-001 07/01/2007

HIGHWAY IMPROVEMENT

	Rates	Fringes
Parking Lot Striping/Highway Marking:		
GROUP 1.....	\$ 26.76	11.54
GROUP 2.....	\$ 21.55	11.54
GROUP 3.....	\$ 22.18	11.54

CLASSIFICATIONS

GROUP 1: Striper: Layout and application of painted traffic stripes and marking; hot thermo plastic; tape, traffic stripes and markings

GROUP 2: Gamecourt & Playground Installer

GROUP 3: Protective Coating, Pavement Sealing

PAIN1237-001 01/01/2008

ALPINE; COLUSA; EL DORADO (west of the Sierra Nevada Mountains); GLENN; LASSEN (west of Highway 395, beginning at Stacey and including Honey Lake); MODOC; NEVADA (west of the Sierra Nevada Mountains); PLACER (west of the Sierra Nevada Mountains); PLUMAS; SACRAMENTO; SHASTA; SIERRA (west of the Sierra Nevada Mountains); SISKIYOU; SUTTER; TEHAMA; TRINITY; YOLO AND YUBA COUNTIES

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 28.01	12.24

PLAS0300-003 07/01/2007

	Rates	Fringes
PLASTERER		
AREA 295: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Solano, Sutter, Tehema, Trinity, Yolo & Yuba Counties.....	\$ 31.82	13.30

AREA 355: Marin, Napa &
Sonoma Counties.....

\$ 31.82 13.50

PLAS0300-005 07/01/2006

Rates Fringes

CEMENT MASON/CONCRETE FINISHER...

\$ 25.88 15.03

* PLUM0036-005 01/01/2008

AREA 1: ALPINE; AMADOR (south of the San Joaquin River) COUNTIES

AREA 2: BUTTE, COLUSA, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA,
SISKIYOU, SUTTER, TEHAMA, TRINITY AND YUBA COUNTIES

Rates Fringes

PLUMBER

Area 1.....

\$ 33.75 16.18

Area 2.....

\$ 33.75 16.18

PLUM0038-002 07/01/2007

MARIN AND SONOMA COUNTIES

Rates Fringes

PLUMBER

(1) Work on wooden frame
structures 5 stories or
less excluding high-rise
buildings and commercial
work such as hospitals,
prisons, hotels, and
schools.....

\$ 38.00 26.46

(2) All other work.....

\$ 47.50 29.04

PLUM0038-006 07/01/2007

MARIN & SONOMA COUNTIES

Rates Fringes

Landscape/Irrigation Fitter.....

\$ 34.45 18.92

PLUM0343-001 07/01/2007

NAPA AND SOLANO COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER		
Light Commercial.....	\$ 30.60	15.20
All Other Work.....	\$ 39.60	16.85

DEFINITION OF LIGHT COMMERCIAL:

Work shall include strip shopping centers, office buildings, schools and other commercial structures which the total plumbing bid does not exceed Two Hundred and Fifty Thousand (\$250,000) and the total heating and cooling does not exceed Two Hundred Fifty Thousand (\$250,000); or Any projects bid in phases shall not qualify unless the total project is less than Two Hundred Fifty Thousand (\$250,000) for the plumbing bid; and Two Hundred Fifty Thousand (\$250,000) for the heating and cooling bid. Excluded are hospitals, jails, institutions and industrial projects, regardless size of the project

FOOTNOTES: While fitting galvanized material: \$.75 per hour additional. Work from trusses, temporary staging, unguarded structures 35' from the ground or water: \$.75 per hour additional. Work from swinging scaffolds, boatswains chairs or similar devices: \$.75 per hour additional.

PLUM0350-001 01/01/2007

EL DORADO COUNTY (Lake Tahoe area only); NEVADA COUNTY (Lake Tahoe area only); AND PLACER COUNTY (Lake Tahoe area only)

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 25.93	15.02

PLUM0355-001 07/01/2007

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES

	Rates	Fringes
Underground Utility Worker		
/Landscape Fitter.....	\$ 24.35	7.85

PLUM0447-001 07/01/2007

AMADOR (north of San Joaquin River), EL DORADO (excluding Lake Tahoe area), NEVADA (excluding Lake Tahoe area); PLACER (excluding Lake Tahoe area), SACRAMENTO AND YOLO COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER		
Journeyman.....	\$ 37.32	12.90
Light Commercial Work.....	\$ 25.73	9.02

ROOF0081-006 08/01/2007

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
Roofer.....	\$ 28.95	12.65

ROOF0081-007 08/01/2007

ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES

	Rates	Fringes
Roofer.....	\$ 22.82	13.88

SFCA0483-003 07/01/2007

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 44.94	17.30

SFCA0669-003 01/01/2006

ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA,
PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER,
TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 28.85	13.15

SHEE0104-006 07/01/2007

MARIN, NAPA, SOLANO, SONOMA & TRINITY COUNTIES

	Rates	Fringes
Sheet Metal Worker Mechanical Contracts \$200,000 or less.....	\$ 41.32	19.78
All other work.....	\$ 44.90	20.88

SHEE0104-014 07/01/2007

MARIN, NAPA, SOLANO, SONOMA AND TRINITY COUNTIES

	Rates	Fringes
Sheet Metal Worker (Metal decking and siding only).....	\$ 33.08	19.21

SHEE0162-006 07/01/2007

AMADOR, COLUSA, EL DORADO, NEVADA, PLACER, SACRAMENTO, SUTTER,
YOLO AND YUBA COUNTIES

	Rates	Fringes
Sheet Metal Worker.....	\$ 33.69	17.59

SHEE0162-007 07/01/2007

ALPINE COUNTY

	Rates	Fringes
Sheet Metal Worker.....	\$ 28.72	16.03

SHEE0162-008 07/01/2005

BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER,
PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA,
YOLO AND YUBA COUNTIES

	Rates	Fringes
Sheet Metal Worker (Metal decking and siding only).....	\$ 32.84	15.20

SHEE0162-014 07/01/2007

BUTTE, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA, SISKIYOU
AND TEHAMA COUNTIES

	Rates	Fringes
Sheet Metal Worker Mechanical Jobs \$200,000 & under.....	\$ 26.17	17.47
Mechanical Jobs over \$200,000.....	\$ 33.69	17.59

TEAM0094-001 07/01/2007

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 25.63	17.09
GROUP 2.....	\$ 25.93	17.09
GROUP 3.....	\$ 26.23	17.09
GROUP 4.....	\$ 26.68	17.09
GROUP 5.....	\$ 26.93	17.09

FOOTNOTES:

Articulated dump truck; Bulk cement spreader (with or without auger); Dumpcrete truck; Skid truck (debris box); Dry pre-batch concrete mix trucks; Dumpster or similar type; Slurry truck:

Use dump truck yardage rate. Heater planer; Asphalt burner; Scarifier burner; Industrial lift truck (mechanical tailgate); Utility and clean-up truck: Use appropriate rate for the power unit or the equipment utilized.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Dump trucks, under 6 yds.; Single unit flat rack (2- axle unit); Nipper truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump machine; Fork lift and lift jitneys; Fuel and/or grease truck driver or fuel person; Snow buggy; Steam cleaning; Bus or personhaul driver; Escort or pilot car driver; Pickup truck; Teamster oiler/greaser and/or serviceperson; Hook tender (including loading and unloading); Team driver; Tool room attendant (refineries)

GROUP 2: Dump trucks, 6 yds. and under 8 yds.; Transit mixers, through 10 yds.; Water trucks, under 7,000 gals.; Jetting trucks, under 7,000 gals.; Single-unit flat rack (3-axle unit); Highbed heavy duty transport; Scissor truck; Rubber-tired muck car (not self-loaded); Rubber-tired truck jumbo; Winch truck and "A" frame drivers; Combination winch truck with hoist; Road oil truck or bootperson; Buggymobile; Ross, Hyster and similar straddle carriers; Small rubber-tired tractor

GROUP 3: Dump trucks, 8 yds. and including 35 yds.; Transit mixers, over 10 yds.; Water trucks, 7,000 gals. and over; Jetting trucks, 7,000 gals. and over; Vacuum trucks under 7500 gals. Trucks towing tilt bed or flat bed pull trailers; Lowbed heavy duty transport; Heavy duty transport tiller person; Self- propelled street sweeper with self-contained refuse bin; Boom truck - hydro-lift or Swedish type extension or retracting crane; P.B. or similar type self-loading truck; Tire repairperson; Combination bootperson and road oiler; Dry distribution truck (A bootperson when employed on such equipment, shall receive the rate specified for the classification of road oil trucks or bootperson); Ammonia nitrate distributor, driver and mixer; Snow Go and/or plow

GROUP 4: Dump trucks, over 35 yds. and under 65 yds.; Water pulls - DW 10's, 20's, 21's and other similar equipment when pulling Aqua/pak or water tank trailers; Helicopter pilots (when transporting men and materials); Lowbed Heavy Duty Transport up to including 7 axles; DW10's, 20's, 21's and other similar Cat type, Terra Cobra, LeTourneau Pulls, Tournorocker, Euclid and similar type equipment when pulling fuel and/or grease tank trailers or other miscellaneous trailers; Vacuum Trucks 7500 gals and over and truck repairman

GROUP 5: Dump trucks, 65 yds. and over; Holland hauler; Low bed Heavy Duty Transport over 7 axles

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests or summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

SPECIAL CONTRACT REQUIREMENTS

The following Special Contract Requirements amend and supplement the *Standard Specifications for Construction of Roads and Bridges, on Federal Highway Projects (FP-03) Metric Version*, U.S. Department of Transportation, Federal Highway Administration.

SI (METRIC)⁽¹⁾ TO U.S. CUSTOMARY CONVERSION FACTORS (approximate)

To the table on page iv, amend the second line of the MASS and the second line of the ILLUMINATION portion of the table as follows:

Symbol	When You Know	Multiply By	To Find	Symbol
MASS				
kg	kilograms	2.2046	pounds	lb
ILLUMINATION				
cd/m ²	candela/m ²	0.2919	foot-Lamberts	fl

Section 104. – CONTROL OF WORK**104.03 Specifications and Drawings. Add the following:**

(c) As-built working drawings. Prepare and furnish as-built working drawings prior to final acceptance. The Government will provide one set of 280 x 430 millimeter contract drawings to be used exclusively for recording the as-built details of the project. Mark plans on title sheet “As-Built Plans”. Use red ink to record the information described below.

Note all additions or revisions to the location, character and dimensions of the prescribed work shown on the contract drawings. Location changes are to be shown in the same coordinate system used for the staking notes. Strikeout all details shown that are not applicable to the completed work. Check and initial all plan sheets that were incorporated into the completed work without change.

Retain the drawings at the project site and, as work progresses, continuously update them to reflect the as-built details. Submit a copy of the updated as-built drawings at least every 30 days to the CO for review for compliance with these specifications.

As a minimum, show the following information on the as-built drawings:

(1) Title Sheet

- (a) Name of contractor.
- (b) Name of Project Engineer.
- (c) Project completion date.

- (d) Revisions to project length.
- (e) Revisions to begin and end stations of project.
- (f) Revisions to index to sheets.
- (g) Strikeout any schedules or options not awarded.
- (h) A note stating “All work was constructed as designed unless otherwise noted.”

(2) Typical section(s)

- (a) Revisions in dimensions.
- (b) Revisions in materials.
- (c) Revisions in station ranges.
- (d) Revisions to begin and end stations of project, and length of project.
- (e) Revisions to station equations.
- (f) Revisions to slope ratio and curve widening tables.
- (g) Revisions to any notes.

(3) Summary of Quantities and Tabulation Sheets

- (a) Revisions to all quantities, locations, notes/remarks, including totals.
- (b) Strikeout unused pay items.
- (c) Revisions to application rates.
- (d) Revisions to location, type, end treatments, riprap, skew, on drainage summary.

(4) Control Sheets

- (a) Show any control that was removed, destroyed, established, according to Subsections 107.02, paragraph 2; 152.02, paragraph 2; and 152.03.
- (b) Use a unique naming convention for newly established control points. Do not reuse CFL control point numbers.

(5) Plan and profile and layout sheets

- (a) Revisions to the alignment; grades, elevations and stationing of intersection PIs; station equations and superelevation.
- (b) Major changes in the construction limits; particularly changes requiring additional design, additional right of way, or contract modifications. (Show information on plan and profile, layout sheets, and right of way plans if applicable.).
- (c) Changes in permanent rights of way caused by acquisition during construction. (Show information on plan and profile, layout sheets, and right of way plans if applicable). In addition, annotate any construction completed according to agreements made with landowners during construction.
- (d) Revisions in location, type and grade of road approaches.
- (e) Revisions in locations of sub-excavation and roadway obliteration.
- (f) Location, type and elevation of all constructed or relocated utilities, aerial and underground. Location, type and elevation of utilities not previously or inaccurately mapped, but encountered during construction, indicated as “approximate” or “as mapped”. (Show information on plan and profile and layout sheets and utilities plans if applicable).
- (g) Location, size and type of underdrains.

- (h) Location, number and type of horizontal, lateral, trench and blanket drains.
- (i) Revisions to culvert diameter, length, type, stationing, skew, riprap and end treatments.
- (j) Length of culvert extension, skew, and offset from centerline to the ends of extended culverts.
- (k) Channel changes.
- (l) Location of monuments and permanent references replaced according to Subsection 107.02.
- (m) Location, length and type of fencing.
- (n) Location, length, stationing and type of walls.
- (o) Location, length, stationing and end treatment of roadside design features, including, but not limited to, guardrail, guardwall, signs, fences, gates, etc.
- (p) Revisions in location of pavement markings.
- (q) Revisions to parking areas or turnouts location.
- (r) Revisions in location, type and length of curbs, sidewalks, and accessible ramps.
- (s) Revisions to any notes.
- (t) Revisions to permanent erosion control measures.

(6) Structural Sheets

- (a) Stationing of bridge ends.
- (b) Revisions to footing and seal elevations.
- (c) Pile length, size, type and tip elevation.
- (d) Modifications and repairs to drilled shafts.
- (e) Any changes in plan or dimensions including any major changes in reinforcing.

(7) Standards, Details, and Specials

Revisions to notes, dimensions, locations, and materials.

No direct payment will be made for preparing and furnishing as-built working drawings. A retention of 1/10th of 1% of payment due will be withheld from project pay estimates if the Contractor has not kept current the designated set of as-built plans. In addition, a retention of 1/10th of 1% of the contract amount paid to date will be withheld at the end of the project until the set of as-built plans has been submitted to and accepted by the Project Engineer. The final completed as-built working drawings must be submitted to and accepted by the Contracting Officer before final acceptance will be granted on the project.

Section 105. - CONTROL OF MATERIAL**105.01 Source of Supply and Quality Requirements. Add the following:**

Submit samples of materials for quality verification testing for materials required to conform to Sections 703, 704, and 705.

Materials containing petroleum-based solvents such as cutback asphalts and traffic paints may be restricted from use by local laws or ordinances in certain geographic areas. Upon presenting proof of such restrictions, alternate materials considered acceptable to the CO may be substituted for the materials specified in the contract.

105.02 Material Sources

(a) Government-provided sources. Add the following:

Refer to Section 201 for merchantable timber, clearing and timber sale requirements.

(b) Contractor-located sources. Add the following to the end of the first paragraph:

For Contractor-located, non-commercial sources, secure environmental clearances according to Subsection 107.10.

105.03 Material Source Management. Delete the first paragraph and substitute the following:

If the contractor chooses to utilize on-site material from within the roadway excavation limits as indicated in 105.05 notify the CO 30 days prior to start of any material production.

If on-site materials are used, prepare and submit for approval a source development plan, and describe all work necessary to produce acceptable materials meeting contract requirements.

Include:

- Identify limits of area necessary
- Determine the quantity and type of equipment
- Methods used to optimize source materials to produce the aggregate type and quality required
- List of equipment to be used
- Crusher and Stockpile locations
- Erosion control measures
- Environmental Protection Plan to address containment of chemicals, petroleum products and requirements described in Subsection 107
- Method for disposal of overburden and waste
- Reclamation plan

If rock blasting is to be performed, submit a blasting plan in accordance with Section 205 and 107.11 for approval. Submit a blasting plan and blasting schedule 30-days prior to scheduled blasting too allow for plan review and approval. Blasting during nighttime hours will not be allowed.

105.04 Storing and Handling Material. Add the following after the third sentence of the second paragraph:

For Contractor-located, non-commercial staging, storing, and material handling areas, secure environmental clearances according to Subsection 107.10.

Add the following:

The Contractor may use any existing pullout, prepared areas within Dinner Gulch (approximate station 17+750) or other sites within the project limits for staging and storage. All staging and storage sites will comply with the regulations stated in Section 107.

105.05 Use of Material Found in the Work. Add the following:

FHWA performed tests on rock samples collected along the project. The results of material tested are shown in Table 105-1. The qualities of materials tested meet the material requirements for some of the contract items. The material in this area may contain layers or pockets of material different than that tested. Variation in material in this area may and should be expected.

The contractor will determine, based on equipment availability and needs, whether equipment needed can be used within the construction limits. Any excavation outside of the construction limits must be approved by the CO and be in accordance with 105.03.

TABLE 105-1 ROCK SAMPLE - TEST RESULTS					
Laboratory Number	06-1972-AGG	06-1973-AGG	06-1974-AGG	06-1975-AGG	06-1976-AGG
Field Number	1 & 2	1 & 2	1 & 2	1 & 2	1 & 2
Sample Station	19+680 to 19+860, Left	20+520 to 20+700, Left	20+780 to 20+920, Left	20+940 to 21+600, Left	21+760 to 21+990, Left
AASHTO T 96 LA Abrasion, Grading A, % Loss	15	26	16	16	15
AASHTO T 104 Sodium Sulfate Soundness, % Loss	1	3	0	1	1
AASHTO T 210 Coarse Aggregate Durability Index	90	76	87	73	76
This material was laboratory crushed to - 38 mm before testing.					

Section 106. - ACCEPTANCE OF WORK

106.01 Conformity with Contract Requirements. Delete the text of this Subsection and substitute the following:

Follow the requirements of FAR Clause 52.246-12 Inspection of Construction.

References to standard test methods of AASHTO, ASTM, GSA, and other recognized standard authorities refer to the methods in effect on the date of solicitation for bids.

Perform all work to the lines, grades, cross-sections, dimensions, and processes or material requirements shown on the plans or specified in the contract.

Incorporate manufactured materials into the work according to the manufacturer's recommendations or to these specifications, whichever is more strict.

Plan dimensions and contract specification values are the values to be strived for and complied with as the design values from which any deviations are allowed. Perform work and provide material that is uniform in character and reasonably close to the prescribed value or within the specified tolerance range. The purpose of a tolerance range is to accommodate occasional minor variations from the median zone that are unavoidable for practical reasons.

When standard manufactured items are specified (such as fence, wire, plates, rolled shapes, pipe conduits, etc., that are identified by gauge, unit mass, section dimensions, etc.), the identification will be considered to be nominal masses or dimensions. Unless specific contract tolerances are noted, established manufacturing tolerances will be accepted.

The Government may inspect, sample, or test all work at any time before final acceptance of the project. When the Government tests work, copies of test reports are furnished to the Contractor upon request. Government tests may or may not be performed at the work site. If Contractor testing and inspection is verified by the Government, the Contractor's results may be used by the Government to evaluate work for acceptance. Do not rely on the availability of Government test results for process control.

Acceptable work conforming to the contract will be paid for at the contract unit bid price. Four methods of determining conformity and accepting work are described in Subsections 106.02 to 106.05 inclusive. The primary method of acceptance is specified in each Section of work. However, work may be rejected at any time it is found by any of the methods not to comply with the contract.

Remove and replace work that does not conform to the contract, or to prevailing industry standards where no specific contract requirements are noted, at no cost to the Government.

(a) Disputing Government test results. If the accuracy of Government test results is disputed, promptly inform the CO. If the dispute is unresolved after reasonable steps are taken to resolve

the dispute, further evaluation may be obtained by written request. Include a narrative describing the dispute and a proposed resolution protocol that addresses the following:

- (1) Sampling method
- (2) Number of samples
- (3) Sample transport
- (4) Test procedures
- (5) Testing laboratories
- (6) Reporting
- (7) Estimated time and costs
- (8) Validation process

If the evaluation requires additional sampling or testing be performed, mutually agree with the Government on witnessing procedures and on sampling and testing by a third party laboratory. Use a third party laboratory accredited by the AASHTO accreditation program. Provide proof of the laboratory's accreditation for the test procedures to be used. Do not use the same laboratory that produced the disputed Government test results or that produced the test results used as a basis for the dispute.

The CO will review the proposed resolution protocol and may modify it before final approval and execution.

The Government will use the approved resolution protocol test results to determine the validity of the disputed testing. If the Government test results are validated, the Contractor will be responsible for all costs associated with developing and performing the resolution protocol. If the Government test results are not validated, the Government will be responsible for all costs associated with developing and performing the resolution protocol. If the validity of the Government test results cannot be determined, the Contractor and Government will equally share all costs associated with developing and carrying out the resolution protocol.

(b) Alternatives to removing and replacing non-conforming work. As an alternative to removal and replacement, the Contractor may submit a written request to:

- (1) Have the work accepted at a reduced price; or
- (2) Be given permission to perform corrective measures to bring the work into conformity.

The request must contain supporting rationale and documentation. Include references or data justifying the proposal based on an evaluation of test results, effect on service life, value of material or work, quality, aesthetics, and other tangible engineering basis. The CO will determine disposition of the nonconforming work.

Where sample/testing procedures make reference to AASHTO, ASTM, or other standards (designated as FLH T), the procedure as modified in the Materials Manual shall govern. Where the specifications make reference to AASHTO Test T11, "Procedure B - Washing Using a Wetting Agent" shall be the procedure followed.

Where the specifications make reference to AASHTO Test T310, “Direct Transmission Method of In-Place Nuclear Density and Moisture Content” shall be the procedure followed.

Reference to the Materials Manual means the Federal Lands Highway “Field Materials Manual, U.S. Department of Transportation, Federal Highway Administration,” Publication No. FHWA-FL-91-002, dated March 1991, revised March 1994, and all amendments and supplements thereto. Copies are available upon request from CFLContracts@fhwa.dot.gov or by FAX to 720-963-3360.

106.03 Certification. Add the following after the second paragraph:

See Table 106-3 for schedule for full or partial acceptance by material certification. Submit certification and sample of material for testing as required.

106.05 Statistical Evaluation of Work and Determination of Pay Factor (Value of Work).

(b) Acceptance. Delete the last sentence of the second paragraph and substitute the following:

If a lot is concluded or terminated with fewer than three samples, the samples will be combined with those of an adjacent lot. In the event there is no adjacent lot, the material will be accepted according to Subsection 106.04.

Table 106-2 Pay Factors. Delete Table 106.02 and substitute the following:

PAY FACTOR		Minimum Required Percent of Work Within Specification Limits for a Given Pay Factor (P _U + P _L) – 100															
Category	I	II	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10 to n=11	n=12 to n=14	n=15 to n=17	n=18 to n=22	n=23 to n=29	n=30 to n=42	n=43 to n=66	n=67 to ∞
	1.05							100	100	100	100	100	100	100	100	100	100
	1.04						100	99	97	95	96	96	96	97	97	97	97
	1.03					100	98	96	94	92	93	93	94	95	95	96	96
	1.02					99	97	94	91	89	90	91	92	93	93	94	94
	1.01		100	100	100	98	95	92	89	87	88	89	90	91	92	92	93
	1.00		69	75	78	80	82	83	84	85	86	87	88	89	90	91	92
	0.99		66	72	76	78	80	81	82	83	84	85	86	87	89	90	91
	0.98		64	70	74	76	78	79	80	81	82	84	85	86	87	88	90
	0.97		63	68	72	74	76	77	78	79	81	82	83	84	86	87	88
	0.96		61	67	70	72	74	75	76	78	79	81	82	83	84	86	87
	0.95	1.00	59	65	68	71	72	74	75	76	78	79	80	82	83	84	86
	0.94	0.99	58	63	67	69	71	72	73	75	76	78	79	80	82	83	85
	0.93	0.98	57	62	65	67	69	71	72	73	75	76	78	79	80	82	84
	0.92	0.97	55	60	63	66	68	69	70	72	73	75	76	78	79	81	82
	0.91	0.96	54	59	62	64	66	68	69	70	72	74	75	76	78	79	81
	0.90	0.95	53	57	61	63	65	66	67	69	71	72	74	75	77	78	80
	0.89	0.94	51	56	59	62	63	65	66	68	69	71	72	74	75	77	79
	0.88	0.93	50	55	58	60	62	64	65	66	68	70	71	73	74	76	78
	0.87	0.92	49	53	57	59	61	62	63	65	67	68	70	71	73	75	77
	0.86	0.91	48	52	55	58	59	61	62	64	66	67	69	70	72	74	76

Note: If the value of $(P_U + P_L) - 100$ does not correspond to a $(P_U + P_L) - 100$ value in this table, use the next smaller $(P_U + P_L) - 100$ value.

(continued)

Table 106-2 Pay Factors (continued)

PAY FACTOR		Minimum Required Percent of Work Within Specification Limits for a Given Pay Factor ($P_U + P_L$) - 100														
Category		n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10 to n=11	n=12 to n=14	n=15 to n=17	n=18 to n=22	n=23 to n=29	n=30 to n=42	n=43 to n=66	n=67 to ∞
I	II															
0.85	0.90	46	51	54	56	58	60	61	62	64	66	67	69	71	72	75
0.84	0.89	45	49	53	55	57	58	60	61	63	65	66	68	70	71	73
0.83	0.88	44	48	51	54	56	57	58	60	62	64	65	67	69	70	72
0.82	0.87	43	47	50	53	54	56	57	59	61	62	64	66	67	69	71
0.81	0.86	41	46	49	51	53	55	56	58	59	61	63	64	66	68	70
0.80	0.85	40	44	48	50	52	54	55	56	58	60	62	63	65	67	69
0.79	0.84	39	43	46	49	51	52	54	55	57	59	61	62	64	66	68
0.78	0.83	38	42	45	48	50	51	52	54	56	58	59	61	63	65	67
0.77	0.82	36	41	44	46	48	50	51	53	55	57	58	60	62	64	66
0.76	0.81	35	39	43	45	47	49	50	52	54	56	57	59	61	63	65
0.75	0.80	33	38	42	44	46	48	49	51	53	54	56	58	60	62	64
REJECT	0.79	32	37	40	43	45	47	48	49	52	53	55	57	59	60	63
	0.78	30	36	39	42	44	45	47	48	50	52	54	56	57	59	62
	0.77	28	34	38	41	43	44	46	47	49	51	53	55	56	58	61
	0.76	27	33	37	39	42	43	45	46	48	50	52	53	55	57	60
	0.75	25	32	36	38	40	42	43	45	47	49	51	52	54	56	59

Values Less Than Those Shown Above

Note: If the value of $(P_U + P_L) - 100$ does not correspond to a $(P_U + P_L) - 100$ value in this table, use the next smaller $(P_U + P_L) - 100$ value.

Table 106-3 Schedule For Full or Partial Acceptance by Materials Certification. Add Table 106-3 following Table 106-2.**Table 106-3**
Schedule For Full or Partial Acceptance by Materials Certification

Section	Description	Material	Material Property Or Specification	Frequency	
				Certification	Sample
306	Dust Palliative	Magnesium Chloride, Emulsified Asphalt, Lignin Sulfonate, Calcium Chloride	As specified	1 per shipment	First shipment
308	Minor Crushed Aggregate	Crushed Aggregate	Source, Quality and Gradation	1 per source	1 per source
404 and 417	Minor Hot Asphalt Concrete, Minor Cold Asphalt Mix	Aggregate Asphalt Mix	Source quality, Gradation, Stability, and Grade	1 per mix	1 per source
634 and 635	Permanent Pavement Markings, Temporary Traffic Control	634.02 as applicable, 635 as applicable	As specified	1 per source	-----
701	Hydraulic Cement	Portland Cement, Blended Hydraulic Cement and Masonry Cement	AASHTO M 85, M 240, and ASTM C 91	1 per shipment	1 per 100 tons
702.01	Asphalt Material	Asphalt Cement	AASHTO M 20, M 226, MP 1 or as applicable	1 per shipment	1 per shipment
702.02	Asphalt Material	Cut-back Asphalt	AASHTO M 81 or M 82 as applicable	1 per shipment	1 per shipment
702.03	Asphalt Material	Emulsified Asphalt	AASHTO M 140 or M 208 as applicable	1 per shipment	1 per shipment
702.05	Asphalt Material	Asphalt Materials used for Damproofing and Waterproofing Concrete Surfaces	As specified for each type of asphalt material	1 per shipment	-----
702.06	Recycling Agent	As specified	As applicable	1 per shipment	1 per shipment
702.08	Antistrip	As specified	As applicable	1 per shipment	-----
706	Concrete and Plastic Pipe	As specified	As applicable	1 per shipment	-----
707	Metal Pipe	Metal Pipe as specified	As applicable	1 per shipment	-----
708	Paint	As specified	As applicable	1 per batch\lot	1 sample for quantities >100L

Section	Description	Material	Material Property Or Specification	Frequency	
				Certification	Sample
709	Reinforcing Steel and Wire Rope	As specified	As applicable	1 per shipment	For 709.01 & 709.03 submit 3 1-meter bars of each size and grade of bar furnished. 709.02 submit 1 2-meter length for each size furnished
710	Fence and Guardrail	As specified	As applicable	1 per shipment	-----
711	Concrete Curing Material and Admixtures	As specified	As applicable	1 per material source per material type	-----
712	Joint Material (all)	As specified	As applicable	1 per shipment	-----
713	Roadside Improvement Materials (all)	As specified	As applicable	1 per shipment	-----
714	Geotextile and Geocomposite Drain	As specified	As applicable	1 per shipment	1 per project per type
715	Piling	As specified	As applicable	1 per shipment	-----
716	Material for Timber Structures	Timber and Hardware	As applicable	1 per shipment	-----
717	Structural Metal	As specified	As applicable	1 per shipment	717.01(e) minimum 6 per shipment for each size used. 717.10 1 per project
718	Traffic Signing and Marking (all)	As specified	As applicable	1 per shipment	-----
720	Structural Wall and Stabilized Materials (all)	As specified	As applicable	1 per shipment per material type	-----
721	Electrical and Illumination Material (all)	As specified	As applicable	1 per shipment per material type	-----
722	Anchor Material	As specified	As applicable	1 per shipment per material type	-----
725	Miscellaneous materials	As specified	As applicable	1 per shipment per material type	-----

Section 107. - LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC**107.01 Laws to be Observed. Add the following:**

The Government will be performing biological surveys in the project area. Follow the requirements of any permits and regulations regarding the discovery of sensitive species.

Add the following:

Timber Contract

Enter into a Forest Service Timber Settlement contract as attached in Appendix A and pay to the Forest Service the lump sum price of \$41,864.66 as payment in full for all merchantable and sub-merchantable timber involved in clearing and grubbing and selective removal of trees. Refer to Section 201 for additional information.

The contact for the timber sale contract is Mr. George Steel, Timber Sale Administration, Forest Service Representative Shasta-Trinity National Forest, (530) 964-3752. The contract must be awarded and timber must be paid for by the contractor prior to the start of clearing operations. Provide 2-week notice to the Forest Service prior to commencing clearing operations to obtain Notice to Proceed on the Timber Sale Contract.

Section 401 and 404 of the Clean Water Act.

Comply with the terms and conditions of the 404 permit. Comply with the terms and conditions of any permits that are issued for the performance of work within the jurisdictional waters of the U.S.

The Government is awaiting Section 401 Water Quality Certification by the California Regional Water Quality Control Board. Receipt of Certification will occur prior to contract award.

National Pollutant Discharge Elimination System (NPDES)

Obtain a separate NPDES permit associated with industrial activity for any mobile asphalt and concrete plants that provide material for the project.

Implement the requirements of the (NPDES) for erosion control due to storm water runoff during construction as specified under the NPDES General Permit No. CAS000002 for California.

(a) General. Designate the erosion control/water quality supervisor according to Subsection 157.03 who will be responsible for implementing the Storm Water Pollution Prevention Plan (SWPPP). Ensure familiarity with SWPPP procedures and practices and ensure that emergency procedures and the SWPPP are updated as needed and available for inspection.

(b) Preparation of SWPPP. At least three weeks prior to beginning construction provide a draft SWPPP for the project, which includes the following information and forms:

- (1) Site Description
- (2) Expected sequencing of operations and construction schedule
- (3) Weather monitoring procedure
- (4) Descriptions and details of erosion and sediment controls, including dust control
- (5) Erosion Control Details and Quantities provided in the Plans
- (6) Controls for other potential onsite storm water pollutants
- (7) Spill prevention, control, and countermeasures plan (see (e) below)
- (8) Applicable specifications and Special Contract Requirements
- (9) Maintenance and inspection procedures and forms
- (10) Description of potential non-storm water discharges at the site
- (11) Copy of Notice of Intent (NOI) form submitted by CFLHD
- (12) Blank Notice of Termination (NOT) form
- (13) Contractor and Subcontractor Certification forms
- (14) Other record keeping forms and procedures
- (15) “Good housekeeping” practices and requirements

Modify the erosion and sediment control details, layout sheets, and quantities included in the plans if necessary to address project site conditions and proposed construction operations and include them in the SWPPP.

To comply with the General Permit, jointly review the draft SWPPP with the CO and agree to any needed revisions. Jointly approve and sign the revised SWPPP. The approved SWPPP will describe and ensure the implementation of practices, which will be used to reduce the pollutants in storm water discharges to assure compliance with the terms and conditions of the General Permit. When the SWPPP is approved and signed by the CO and Contractor, it will be the document in force on the project. Implement the SWPPP as required throughout the construction period.

Place the SWPPP and all updates in a three-ring binder so that completed inspection forms and other records may be inserted. Maintain a current copy of the SWPPP, including a copy of the permit, NOI, Waste Discharge Identification (WDID), and all associated records and forms at the job site throughout the duration of the project. Make the SWPPP available for public inspection and for the inspection and use of the CO.

Maintain all related erosion control elements in proper working order throughout construction. Do not perform clearing and grubbing or earthwork until the SWPPP has been implemented.

Prior to construction, the Contractor and all subcontractors must sign certifications (included in the SWPPP) that they understand the requirements of the General Permit. Ensure that all subcontractors comply with the requirements of the General Permit.

At the completion of the project, provide the CO with the SWPPP, including inspection forms and all data used in developing and modifying the SWPPP. The Contractor is also required to retain a copy for a period of at least three years from the date the site is finally stabilized.

(c) Notice of Intent (NOI). Post the NOI at the construction site bulletin board throughout the duration of the project.

(d) Erosion Controls. Implement soil erosion controls according to the SWPPP and Section 157.

(e) Controls for Other Pollutants. Implement controls to eliminate the discharge of pollutants (other than erodible soil) into storm water, such as pollutants from materials stored onsite. Include the implementation of spill prevention and material management controls and practices to prevent the release of pollutants into storm water. Include these controls and practices and storage procedures for chemicals, construction materials and other pollution prevention measures in the SWPPP. List the quantities in the SWPPP for all petroleum products and hazardous material used on the project.

A spill prevention, control and countermeasures plan is required if the volume of oil (including fuel) in a single location exceeds 5000 liters (1320 gallons). The total storage volume is the sum of all containers with a capacity of 210 liters (55 gallons) or more.

Protect any fuel storage areas with secondary containment one and one-half times the capacity of the original container; surround storage areas with a berm and lined with plastic or other impermeable barriers.

Develop a sampling and analysis program for pollutants not visually detectable in storm water consistent with "Section B: Monitoring and Reporting Requirements" of the General Permit.

(f) "Good Housekeeping" Practices and Requirements. Specify the Contractor's "good housekeeping" practices and requirements, including vehicle wash-down areas, onsite and offsite tracking control, protection of equipment storage and maintenance areas, and sweeping of highways and roadways related to hauling activities in the SWPPP.

Take precautions to prevent pollution of streams, lakes, and reservoirs with fuels, oil, bitumens, calcium chloride, magnesium chloride, Portland cement, fresh Portland cement concrete, raw sewage, muddy water, chemicals or other harmful materials. Do not discharge these materials into channels leading to any stream, lake or reservoir.

Locate machinery servicing and refueling areas away from streambeds and washes to reduce the possibility and minimize the impacts of accidental spills or discharges. Locate staging areas a minimum of 7.6 m (25 ft.) distant from aquatic habitats, water resources, or wetlands in the Project Vicinity. Do not park or store equipment overnight within 7.6 m (25 ft.) of an aquatic resource.

Remove non-waste materials, such as used cans, oils, machine and equipment parts, paint, hazardous materials, plastic and rubber parts, discarded metals, and building materials from the construction site and dispose of at an approved landfill.

Where the Contractor's working area encroaches on a running or intermittent stream, construct and maintain adequate barriers to prevent the discharge of any contaminants into the stream.

Do not operate mechanical equipment in running streams unless approved in writing by the CO. Fording of running streams with construction equipment will not be permitted. Obtain approval from the CO to use temporary bridges or other structures whenever crossings are necessary.

Immediately clear streams, lakes and reservoirs of all work items, debris or other obstructions inadvertently placed thereby or resulting from construction operations.

When construction needs to cease for periods longer than three days, store all equipment in staging areas, and clear the roadway and roadsides of litter and unnecessary road building materials, such as concrete, rebar, and posts.

(g) Inspections and Revisions to the SWPPP. Conduct inspections before and within 24 hours after storm events and once each 24-hour period during extended storm events. Conduct a minimum of one site inspection per month for areas that receive less than 510 millimeters (20 inches) of annual rainfall. Inspection frequency can be reduced to one per month if: 1) the site is temporarily stabilized, 2) runoff is unlikely due to winter conditions (site is covered with snow, ice, or the ground is frozen, or 3) during seasonal arid and semi-arid periods (areas with an average rainfall of 510 millimeters (20 inches) or less). Conduct a minimum of one site inspection every seven calendar days where the mean annual rainfall equals 510 millimeters (20 inches) or more. The area of inspection includes, but is not limited to, disturbed areas that have not been finally stabilized, areas used for storage of materials, locations where vehicles enter or exit the site, and all of the erosion and sediment controls that are included in the SWPPP. Monitor rainfall with a rain gauge accurate to the nearest 13 millimeters (0.5 inches) of rain.

Document the inspections on forms provided in the SWPPP. Be consistent with the State Water Quality Control Board inspection forms, and sign according to the requirements of the SWPPP and the General Permit. Retain inspection forms onsite in the SWPPP notebook throughout the construction period.

Revisions to the SWPPP may be necessary during construction to make improvements or to respond to unforeseen conditions noted during construction or site inspections. For that purpose, specify in the SWPPP the mechanism whereby revisions may be proposed by the Contractor or the CO and incorporated into the plan, including review and approval of minor changes. Jointly approve and sign each revision to the SWPPP before implementation. Implement approved modifications within 7 calendar days following the date of the inspection when deficiencies or necessary corrections were first noted.

107.02 Protection and Restoration of Property and Landscape

Add the following to the fourth paragraph:

In the event that previously unidentified cultural resources, human burial or remains are encountered during construction, there will be no further excavation or disturbance of that area. Avoid the materials and their context. Notify the CO immediately. A qualified archaeologist will evaluate the find to determine its historical or archaeological eligibility. If the find is determined to be an eligible historical or archaeological resource, the archaeologist will make recommendations for appropriate mitigation. Work in the area will not resume until the mitigation measures recommended by the archaeologist have been implemented.

Add the following after the last paragraph:

Restore any offsite areas used for storage, rock crushing, batch plant, or other operations to their original condition to the extent possible. This may include, but is not limited to regrading and revegetation.

Research for existing utilities in this segment of the project revealed no known utilities are affected by the project. Contact USA NORTH prior to beginning construction activities to update the status of utilities and to comply with state requirements regarding utility locates.

107.03 Bulletin Board. Add the following:

(g) “Beck” poster, according to FAR Clause 52.222-39 Notification of Employee Rights Concerning Payment of Union Dues or Fees.

107.08 Sanitation, Health and Safety

Add the following:

Conform to Chapter 6.95 of the California Health and Safety code in developing a Hazardous Materials Business Plan for storing over 226.80 kilograms (500 pounds) of hazardous materials within the project area and at any offsite areas of operation, as implemented by the Certified Unified Program Agency, Trinity County.

Provide portable sanitation facilities sufficient for the number of workers on site.

Do not feed or intentionally disturb wildlife.

Provide covered waste collection bins at each staging area.

107.10 Environmental Protection. Delete the text and substitute the following:

(a) Spills of Petroleum Products or Hazardous Materials. Properly clean up, mitigate, and remedy, if necessary, all spills of petroleum products, hazardous materials, or other chemical or biological products released from construction, fleet, or other support vehicles, or stationary sources. Respond in accordance with federal, state, and local regulations.

Immediately report to the CO any spill of petroleum products or a hazardous material. Report the spill to the appropriate federal, state, and local authorities, if the spill is a reportable quantity. If contaminated soil or groundwater is discovered during construction, report this to the CO immediately.

(b) Water pollution. Do not operate mechanized equipment or discharge or otherwise place any material within the wetted perimeter of any waters of the U.S. within the scope of the Clean Water Act (33 USC § 1251 et seq.). This includes wetlands unless authorized by a permit issued by the U.S. Army Corps of Engineers according to 33 USC § 1344, and, if required, by any State agency having jurisdiction over the discharge of material into the waters of the U.S. In the event of an unauthorized discharge:

- (1) Immediately prevent further contamination;
- (2) Immediately notify appropriate authorities; and
- (3) Mitigate damages as required.

Comply with the terms and conditions of any permits that are issued for the performance of work within the wetted perimeter of the waters of the U.S.

Separate work areas, including material sources, by the use of a dike or other suitable barrier that prevents sediment, petroleum products, chemicals, or other liquid or solid material from entering the waters of the U.S. Use care in constructing and removing the barriers to avoid any discharge of material into, or the siltation of, the water. Remove and properly dispose of the sediment or other material collected by the barrier.

(c) Vehicles and equipment. All vehicles and equipment entering Trinity County and the project area must be clean of noxious weeds and free from oil leaks and are subject to inspection. Wash all construction equipment to thoroughly remove all dirt, plant, and other foreign material prior to entering the project. Particular attention must be shown to the under carriage and any surface where soil containing exotic seeds may exist. These efforts are critical to prevent the introduction and establishment of non-native plant species into the project area. Make arrangements for the CO to inspect each piece of equipment before entering the project. The CO will maintain records of inspections. Equipment found operating on the project that has not been inspected, or has oil leaks will be shut down and subject to citation.

Maintain equipment and vehicle engines in good condition and in proper tune per manufacturer's specifications. In general, when gasoline, diesel fuel, antifreeze, hydraulic fluid or any other chemical contained within the vehicle is released to the pavement or ground, proper corrective,

clean-up, and safety actions specified in the SWPPP must be immediately implemented. All vehicles with load rating of 2 tons or greater should carry, at minimum, enough absorbent materials to effectively immobilize the total volume of fluids contained within the vehicle.

Repair oil leaks immediately on discovery. Do not use equipment that is leaking. Have oil pans and absorbent material in place prior to beginning repair work. Have the “on scene” capability of catching and absorbing leaks or spillages of petroleum products including antifreeze from breakdowns or repair actions with approved absorbent materials. Keep a supply of acceptable absorbent materials at the job site in the event of spills, as defined in the SWPPP. Sand or soil is not approved absorbent materials.

Use oil pans and absorbent materials to prevent leaks, spills and draining petroleum fluids from falling onto bare ground and paved surfaces during servicing of equipment. Dig up soils contaminated with such fluids, place in appropriate safety containers, and dispose of according to state and/or federal regulations.

(d) Environmental Clearances.

(1) Contractor-Selected, Non-Commercial Areas. Contractor-selected, non-commercial areas include, but are not limited to, material sources, disposal sites, waste areas, haul roads, and staging areas. (A commercial source is a current operating concern, which has in the recent past provided same-type materials or services). These requirements do not apply for areas identified by the FHWA as having previously received clearance.

The following sites have received clearance:

- Two potential sites located within approximately 0.7 km of Hyampom Road on Forest Road 3N07 (first Forest Service Road west of Nine Mile Bridge) (previously used for timber sale)
- Potential site located within approximately 2 km of Hyampom Road up Forest Road 3N22 and 3N04 (previously used for timber sale)

The remaining sites shown in the plans as potential stockpile/staging areas have NOT received clearance and they will require the following requirements.

Prior to construction activities in Contractor-selected, non-commercial areas, provide the following to the CO and the FHWA Environmental Section (12300 West Dakota Avenue, Lakewood, CO 80228/Fax 720-963-3610):

(a) A report with documentation, according to the Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation, to determine if prehistoric or historic buildings, structures, sites, objects, or districts listed or eligible for listing in the National Register of Historic Places (NRHP) are present and if they will be affected by the proposed activity. Include information identifying the location, total land area, and type of activity proposed. The FHWA will review this documentation. The FHWA will

coordinate with the State Historic Preservation Officer (SHPO) and other parties, which will require the following time frames:

- (1) Coordination on a “no effect” determination may require 30 days or longer.
- (2) Coordination on eligibility and affects may require 45 days or longer.
- (3) Coordination on mitigation of adverse effects may require 60 days or longer.

(b) Written documentation that such activities will not affect any “Waters of the U.S.” as defined by the U.S. Army Corps of Engineers. Provide documentation by an individual capable of performing wetland delineations according to the 1987 Corps of Engineers’ manual. Documentation of effects to wetlands or other Waters of the U.S. will be submitted to the CO and to the FHWA Environmental Section. If wetlands are affected, coordination with the Corps of Engineers may require 45 days or longer.

(c) Written documentation that such activities will not affect any species protected under the Endangered Species Act (ESA). Provide documentation prepared by a biological specialist. The written documentation will include a “no effect,” a “may affect-is not likely to adversely affect,” or a “may affect-is likely to adversely affect,” determination according to Section 7 of the Endangered Species Act. Submit the documentation to the CO and the FHWA Environmental Section. If the determination is “may affect-is not likely to adversely affect” or “may affect-is likely to adversely affect,” the FHWA will coordinate with the U.S. Fish and Wildlife Service (FWS), which will require the following time frames:

- (1) “May affect-is not likely to adversely affect” may require 45 days or longer.
- (2) “May affect-is likely to adversely affect” may require 150 days or longer.

Contract time will not be increased due to the submittal and approval process for the above three items.

(e) Air Emissions. Properly maintain all construction equipment to minimize pollution of the atmosphere from particulate and gaseous matter. An asphalt batch plant or rock crusher requires an air emissions permit from the California Department of Environmental Quality, Air Quality Division. The project may require a relocation permit for previously operated batch plant or rock crushers within the State of California. Control dust emissions by using water and dust suppressants in construction operations, rock crushing, grading of roads, clearing of land, and on storage piles as warranted. Cover all trucks hauling dirt, sand, silt, or other loose materials or maintain at least 15 cm (6 in.) of freeboard.

(f) Noise Emissions. Control construction noise to the extent possible to minimize effects on wildlife and recreational activities. A well mounted exhaust system free from leaks and properly muffled, as outfitted by the manufacturer, must be furnished for all construction equipment. The use of Jake brakes is not permitted.

Construction is not permitted within 0.40 km (0.25 mi.) of residences at nighttime, on Sundays or federal or state holidays.

Notify the CO one week in advance of percussive activities that are expected, such as pile driving and rock drills. No percussive activities (e.g. blasting or pile driving) will be allowed at night.

(g) Contaminated Soil or Groundwater Contingency Plan. Develop a Contingency Plan to address the actions that will be taken during reconstruction of the roadway should unexpected contaminated soil or groundwater be discovered. The Plan should contain, at a minimum, health and safety considerations, handling and disposal of wastes, reporting requirements, and emergency procedures. Remove any contaminated soil encountered for off-site disposal at an appropriate facility.

107.11 Protection of Forests, Parks, and Public Lands. Add the following:

Follow the requirements of the *Water Quality Management for Forest System Lands in California, Best Management Practices* when using Forest Service Roads outside of the project limits (staging and stockpile areas). Particular attention should be given to Section 12.2, Road and Building Site Construction, BMP No. 24, Traffic Control During Wet Periods. The wet periods for this site are typically from October 15 to May 15. This document can be found at:

http://www.fs.fed.us/r5/publications/water_resources/waterquality/water-best-mgmt.pdf

The following Forest Service fire prevention plan involving emergency curtailment of operations is in effect on this project. The CO will order the suspension of burning and other operations when directed to do so by the Forest Service. No adjustment in the contract completion date will be made for partial or total suspensions of burning operations.

FIRE PLAN FOR CONSTRUCTION AND SERVICE CONTRACTS

6-14-2006

(Ref: FSH 6309.32 and 6309.11)

1. SCOPE:

The provisions set forth below outline the responsibility for fire prevention and suppression activities and establish a suppression plan for fires within the contract area. The contract area is delineated by map in the contract. The provisions set forth below also specify conditions under which contract activities will be curtailed or shut down.

2. RESPONSIBILITIES:

A. Contractor

- (1) Shall abide by the requirements of this Fire Plan.

(2) Shall take all steps necessary to prevent his/her employees, subcontractors and their employees from setting fires not required in completion of the contract, shall be responsible for preventing the escape of fires set directly or indirectly as a result of contract operations, and shall extinguish all such fires which may escape.

(3) Shall permit and assist in periodic testing and inspection of required fire equipment. Contractor shall certify compliance with specific fire precautionary measures in the fire plan, before beginning operations during Fire Precautionary Period and shall update such certification when operations change.

(4) Shall designate in the fire plan and furnish on Contract Area during operating hours a qualified fire supervisor authorized to act on behalf of Contractor in fire prevention and suppression matters.

(5) Shall complete the Contractor's Plan Regarding Personnel and shall furnish the Contracting Officer (CO) with a copy prior to commencing work at the site. Shall currently advise the CO of any changes in personnel as the changes occur. Shall revise Section 6.B to reflect current activities upon request of the CO.

B. Forest Service

The Forest Service may conduct one or more inspections for compliance with the fire plan. The number, timing, and scope of such inspections will be at the discretion of agency employees responsible for contract administration. Such inspections do not relieve the Contractor of responsibility for correcting violations of the fire plan or for fire safety in general, as outlined in paragraph 2.A above.

3. **TOOLS AND EQUIPMENT:**

- A. The Contractor shall comply with the following requirements during the fire precautionary period as defined by unit administering contracts unless waived in writing:

The Fire Precautionary Period is July 15 to October 15.

Contractor shall equip each operating tractor and any other internal combustion engine with a spark arrester, except for motor vehicles equipped with a maintained muffler as defined in C.P.R.C. Section 4442 or tractors with exhaust-operated turbochargers. Spark Arresters shall be a model tested and approved under Forest Service Standard 5100-1a as shown in the National Wildlife Coordinating Group Spark Arrester Guide, Volumes 1 and 2, and shall be maintained in good operating condition.

Contractor shall meet minimum requirements of Sections 4427 and 4428 of the California Public Resources Code (C.P.R.C.). Fire tools kept at each operating landing shall be sufficient to equip all employees in the felling, yarding, loading, chipping, and material processing operations associated with each landing. Fire equipment shall include two

tractor headlights for each tractor dozer used in Contractor's Operations. Tractor headlights shall be attachable to each tractor and served by an adequate power source.

Where cable yarding is used, Contractor shall provide a size 0 or larger shovel with an overall length of not less than 1.1 m (46 inches) and a filled backpack can (4 or 5 gallon) with hand pump within 3.0 m (10 feet) of each tail and corner block.

Trucks, tractors, pickups and other similar mobile equipment shall be equipped with and carry at all times a size 0 or larger shovel with an overall length of not less than 1.1 m (46 inches) and a 2-1/2 pound axe or larger with an overall length of not less than 0.7 m (28 inches).

Contractor shall equip each internal combustion yarder, fuel truck, and loader with a fire extinguisher for oil and grease fires (4-A:60-B:C).

Contractor shall equip each mechanized harvesting machine with hydraulic systems, powered by an internal combustion engine (chipper, feller/buncher, harvester, forwarder, hot saws, stroke delimber, etc), except tractors and skidders, with at least two 4-A:60-B:C fire extinguishers or equivalent. In addition, concentrations of wood dust and debris shall be removed from such equipment daily. Additional extinguishers and sizes may be required at landings in accordance with Section 5.

Each power saw shall be equipped with a spark arrester approved according to C.P.R.C. Section 4442 or 4443 and shall be maintained in effective working order. One fire extinguisher meeting specifications of C.P.R.C. Section 4431 shall be kept with each operating power saw. A size 0 or larger shovel with an overall length of not less than 0.96 m (38 inches) shall be kept with each gas can but not more than 90 m (300 feet) from each power saw when used off cleared landing areas.

Contractor shall meet minimum requirements of Section 4430 of the California Public Resources Code (C.P.R.C.). Contractor shall provide a water tank truck or trailer on or in proximity to Contract Area during Contractor's Operations hereunder during Fire Precautionary Period unless otherwise agreed. When Project Activity Level B or higher is in effect, a tank truck or trailer shall be on or immediately adjacent to each active landing unless otherwise excepted when hot saw technology is being used. See Section 5 for specific contract requirements.

The tank shall contain at least 300 gallons of water available for fire suppression. A water sprinkling tank truck will meet this requirement if provision is made to insure that the minimum of 300 gallons is available for fire suppression at all times. Ample power and hitch shall be readily available for promptly and safely moving tank over roads serving Contract Area. Tank truck or trailer shall be equipped with following:

- (1) Pump, which at sea level, can deliver 23 gallons per minute at 175 pounds per square inch measured at the pump outlet. Pumps shall be tested on Contract

Area using an 8 mm (5/16 inch) orifice in the Forester One Inch In-Line Gauge test kit. Pump shall meet or exceed the pressure value in the following table for nearest temperature and elevation:

T e m p	Sea Level		1000 Feet		2000 Feet		3000 Feet		4000 Feet		5000 Feet		6000 Feet		7000 Feet		8000 Feet		9000 Feet		10000 Feet	
55	179	23	174	23	169	23	165	22	161	22	157	22	153	22	150	21	146	21	142	21	139	21
70	175	23	171	23	166	22	162	22	158	22	154	22	150	21	147	21	143	21	139	21	136	20
85	171	23	168	23	163	22	159	22	155	22	151	21	147	21	144	21	140	21	136	20	133	20
100	168	23	164	23	159	22	155	22	152	22	148	21	144	21	141	21	137	20	133	20	131	20
	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M	P S I	G P M

The pump outlet shall be equipped with 38 mm (1-1/2) inch National Standard Fire Hose thread. A bypass or pressure relief valve shall be provided for other than centrifugal pumps.

- (2) 90 m (300 feet) of 19 mm (3/4-inch) inside diameter rubber-covered high-pressure hose mounted on live reel attached to pump with no segments longer than approximately 15 m (50 feet), when measured to the extreme ends of the couplings. Hose shall have reusable compression wedge type 25mm (1-inch) brass or lightweight couplings (aluminum or plastic). One end of hose shall be equipped with a coupling female section and the other end with a coupling male section. The hose shall, with the nozzle closed, be capable of withstanding 200 PSI pump pressure without leaking, distortions, slipping of couplings, or other failures.
- (3) A shut-off combination nozzle that meets the following minimum performance standards when measured at 100 P.S.I. at the nozzle:

	G.P.M.	Horizontal Range
Straight Stream	10	11.6 m (38 feet)
Fog Spray	6 – 20	N/A

- (4) Sufficient fuel to run pumps at least 2 hours and necessary service accessories to facilitate efficient operation of the pump.

When Contractor is using Hot Saw Technology, an additional 152 m (500 feet) of not less than 25 mm (1 inch) outside diameter serviceable hard rubber poly or rubber lined or fiber jacket rubber lined (FJRL) hose shall be immediately available for use

and be capable of connecting to the 90 m (300 feet) of hose and appurtenances in (2) and (3) above. Synthetic hose may be used by agreement.

4. GENERAL

A. State Law. The Contractor shall comply with all applicable laws of the State of California. In particular, see California Public Resource Codes.

B. Permits Required. The Contractor must secure a special written permit from the District Ranger or designated representative before engaging in any of the activities listed below. The terms and conditions of any of the permits required for this contract are as shown on copies attached to the Fire Plan.

(1) Blasting and Storage of Explosives and Detonators. (Explosives Permit required by California Health & Safety Code, Section 12101.)

(2) Burning.

(3) Air Pollution. (Issued by local State or County Air Pollution Control Districts, as applicable.)

(4) Camp, Lunch and Warming Fires.

(5) Welding and Cutting.

C. Regulations for Burning. Before setting any fires whatsoever, the Contractor shall notify the CO of his/her intentions. Special care shall be taken to prevent scorching or causing any damage to adjacent structures, trees, and shrubbery. Piles of material to be burned shall be of such size and so placed that during burning no damage shall result to adjacent objects.

D. Smoking and Fire Rules. Smoking shall not be permitted during fire season, except in a barren area or in an area cleared to mineral soil at least 0.9 m (3-feet) in diameter (CPRC 4423.4). In areas closed to smoking, the CO may approve special areas to be used for smoking. The Contractor shall sign designated smoking areas. Contractor shall post signs regarding smoking and fire rules in conspicuous places for all employees to see. Contractor's supervisory personnel shall require compliance with these rules. Under no circumstances shall smoking be permitted during fire season while employees are operating light or heavy equipment, or walking or working in grass and woodlands.

- E. Storage and Parking Areas.** Equipment service areas, parking areas, and gas and oil storage areas shall be cleared of all flammable material for a radius of at least 3.0 m (10 feet) unless otherwise specified by local administrative unit. Small mobile or stationary internal combustion engine sites shall be cleared of flammable material for a slope distance of at least 3.0 m (10 feet) from such engine. The COR shall approve such sites in writing.
- F. Welding.** Contractor shall confine welding activity to cleared areas having a minimum radius of 3.0 m (10-feet) measured from place of welding.
- G. Blasting.** Contractor shall use electric caps only unless otherwise agreed in writing. When blasting is necessary in slash areas, a watchperson equipped with a size 0 or larger shovel with an overall length of not less than 1.1 m (46 inches) and a filled backpack can (4 or 5 gallon) with hand pump shall remain in the immediate area for an hour after blasting has been completed.
- H. Oil Filter and Glass Jugs.** Contractor shall remove from National Forest lands oily rags and used oil filters and shall prohibit use of glass bottles and jugs in Contractor's Operations.
- I. Reporting Fires.** As soon as feasible but no later than 15 minutes after initial discovery, Contractor shall notify Forest Service of any fires on Contract Area or along roads used by Contractor.
- J. Communications.** Contractor shall furnish a serviceable telephone, radio-telephone or radio system connecting each operating side with Contractor's headquarters. When such headquarters is at a location which makes communication to it clearly impractical, Forest Service may accept a reasonable alternative location. The communication system shall provide prompt and reliable communications between Contractor's headquarters (or agreed to alternative) and Forest Service via commercial or Forest Service telephone. The communications system shall be operable during Contractor's Operations in Fire Precautionary Period described in Section 3 and during the time fire patrolperson service is required. A radio-equipped fire patrolperson vehicle will satisfy this requirement if in operation during the time required except during PAL levels "D" and "Ev". See Section 5 for other communication requirements when operating on "D" and "Ev" days with hot saw technology. A CB is not acceptable communication because FCC Regulations prohibit commercial use.
- K. Fire Patrol Person.** Contractor shall furnish a qualified fire patrolperson each operating day when Project Activity Level B or higher is in effect. When on duty, sole responsibility of patrolperson shall be to patrol the operation for prevention and detection of fires, take suppression action where necessary and notify the Forest Service as required by Section 5.

By agreement, one patrolperson may provide patrol on this and adjacent projects or sales. No patrolperson shall be required on Specified Road construction jobs except during clearing operations unless otherwise specified.

- L. Time of Snag Felling.** Unless the felling of dead trees would interfere with the felling, skidding or yarding of green timber or be a safety hazard, or be prevented under Section 5, required felling of dead trees shall be concurrent with the felling of live timber. There shall be reasonably timely felling of dead trees to facilitate utilization and protection from fire.
- M. Clearing of Fuels.** Contractor shall clear away, and keep clear, fuels and logging debris as follows:

Welding equipment and stationary log loaders, yarders and other equipment listed in California State Law:	3.0 m (10 feet) slope radius
Tail or corner haulback blocks:	1.5 m (5 feet) slope radius
Lines near, between or above blocks:	Sufficient clearing to prevent line from rubbing on snags, down logs and other dead woody material

5. EMERGENCY MEASURES

The table set forth below establishes work restrictions and fire precautions that the Contractor must observe at each activity level. The restrictions are cumulative at each level.

The Forest Service, in its sole discretion, may change the predicted activity level if the current fire suppression situation, weather and vegetation conditions warrant additional restriction of activities. Contractor shall obtain the predicted Project Activity Level by calling the following phone number 866-242-9941 before starting work each day. If practicable, Forest Service will determine the following day's activity level by 6:00 PM local time. If predictions made after 6:00 PM are significantly different than originally estimated, Forest Service will inform Contractor when changes in restrictions or industrial precautions are indicated.

The following definitions shall apply to these Project Activity Levels:

Cable Yarding Systems: A yarding system that takes logs from the stump area to a landing using an overhead system of winch-driven cables to which logs are attached with chokers or grapples.

Hot Saw Technology: A harvesting system that employs a high-speed (>1100 rpm) rotation felling heads (i.e., full rotation lateral tilt head).

Sunset: The time that sunset is reported in the local newspaper for that day.

Except for Project Activity Level days “Ev after 1:00 PM local time” and “E”, Forest Service may issue substitute precautions(s) of the requirements below. Such agreements shall prescribe measures to be taken by Contractor to reduce risk of ignition and/or spread of fire.

Forest Service may change the Project Activity Levels to other values upon revision of the National Fire Danger Rating System and may change the specific Project Activity Levels and/or requirements when such changes are necessary for the protection of the National Forest. When sent to Contractor, the revised Project Activity Levels will supersede the levels below.

PROJECT ACTIVITY LEVEL –EMERGENCY PRECAUTIONS

Table version 6/13/2006

PROJECT ACTIVITY LEVEL

<i>Level</i>	<i>Project Activity Requirements</i>
A	<p>Minimum required by Section 3</p> <ol style="list-style-type: none"> 1. PAL levels are cumulative, Ev level would include all preceding PAL requirements.
B	<ol style="list-style-type: none"> 1. A fire patrolperson is required for mechanical operations from cessation of operations until 2 hours after operations cease or sunset, which ever occurs first. 2. Tank truck or trailer shall be on or adjacent to each active landing. 3. When hot saw technology is being used, the tank truck or trailer (B2 above) may serve dual purpose as active landing tank truck provided it shall be kept readily available for use as follows: <ol style="list-style-type: none"> a. Within one quarter mile of the operating hot saw technology; and b. Within 10 minutes of the active landing; and c. Effective communications exist between hot saw technology and active landing. <p>Otherwise, there shall be a tank truck or trailer at both the active landing and within one quarter mile of the operating hot saw technology.</p> 4. (Additional restrictions specified by the forest.)

C	<ol style="list-style-type: none"> 1. The following operations are prohibited from 1:00 PM until 8:00 PM local time: <ol style="list-style-type: none"> a. Blasting 2. Operations using hot saw technology are prohibited between 1:00 PM and sunset local time. Hot saw technology operations may continue if Contractor provides a portable fire suppression system capable of extinguishing a 6 m (20-foot) by 6 m (20-foot) wild land fire within five (5) minutes of discovery. The following equipment will meet the requirements above: <ol style="list-style-type: none"> a. Compressed Air Foam System with minimum requirements of 20 gallons stored energy, 30 m (100 feet) of 25 mm(1 inch) hose and adjustable 25 mm (1 inch) nozzle, minimum discharge range of 18 m (60 feet) and 1 spare air cylinder; or b. All terrain tank truck or equivalent capable of traveling throughout the cutting unit, containing not less than 300 gallons of water and complies with all tank truck requirements of Section 3. All terrain tank truck or equivalent may serve dual purpose as active landing tank truck provided: <ol style="list-style-type: none"> 1) Tank truck or equivalent shall be kept readily available to extinguish a fire within 5 minutes of discovery of the operating hot saw technology, 2) Tank truck or equivalent shall be no further than 10 minutes travel time to the active landing, 3) A 4-A:80-B:C extinguisher is maintained at the landing fire tool box and, 4) Effective communications exist between the hot saw technology, active landing and all terrain tank truck or equivalent. Otherwise there shall be a tank truck at the active landing and an all terrain tank truck or equivalent with the hot saw technology. 3. (Additional restrictions specified by the forest.)
D	<ol style="list-style-type: none"> 1. The following restrictions apply: <ol style="list-style-type: none"> a. No blasting after 10:00 AM b. Welding or cutting of metal only by special permit c. No Burning without a permit 2. The following activities may not operate after 1:00 PM local time unless fire patrolperson(s) walks all areas operated that day once per hour until sunset local time and has the capability of notifying the designated Forest Service Dispatch Center within fifteen (15) minutes of discovery of a fire: <ol style="list-style-type: none"> a. Track-laying equipment b. Chipping outside of landings and roadbeds c. Equipment using Hot Saw Technology

	<ul style="list-style-type: none"> d. Chainsaw operations outside of landings and roadbeds e. Tree felling operations f. Ripping roads and landings g. Mastication h. Cable-yarding employing motorized carriages. <p>3. (Additional restrictions specified by the forest.)</p>
Ev	<ol style="list-style-type: none"> 1. The following operations are prohibited: <ul style="list-style-type: none"> a. Blasting b. Welding or cutting metal c. Burning 2. Following activities may operate when fire patrolperson walks from 9:00 AM until local sunset all areas once per hour that were mechanically operated that day. <ul style="list-style-type: none"> A. Activities that may operate all day: <ol style="list-style-type: none"> 1. Hauling and loading of logs decked at approved landings. 2. Hauling and loading of chips piled at approved landings. 3. Equipment servicing at approved sites. 4. Roads: Dust abatement or rock aggregate installation (does not include pit or quarry development) 5. Chainsaw or stroke delimber operation associated with loading at approved landing sites. B. All other Operations are permitted until 1:00 PM local time subject to the following: <ol style="list-style-type: none"> 1. When hot saw technology is being used a tractor or other equipment with blade capable of constructing fire line, shall be on standby and immediately available. Tractor will have effective communications with hot saw technology and be within one quarter mile of hot saw technology to quickly reach and effectively attack a fire start. C. (Additional restrictions specified by the forest.)
E	<p>The following activities may operate subject to B1. and B2.</p> <ol style="list-style-type: none"> 1. Hauling and loading of logs decked at approved landings. 2. Hauling and loading of chips piled at approved landings. 3. Equipment at approved sites may be serviced. 4 Roads: Dust abatement or rock aggregate installation (does not include pit development). 5. Chainsaw operation associated with loading at approved landings.

6. REPORTING ALL WILD FIRES

- A. Contractor's employees shall report all fires as soon as possible but no later than 15 minutes after initial discovery to any of the following Forest Service facilities and/or personnel listed below, but not necessarily in the order shown:

	Name	Office Address and/or telephone	Home address and/or telephone
Dispatch Center			
Nearest FS Station	Hayfork R.S.	530-628-5527	
Inspector			
COR			
District Ranger			
D.R. Designated Rep	Annetta Mankins	530-628-1260	

When reporting a fire, provide the following information;

Your Name;

Call back telephone number;

Project name;

Location;

Legal description (Township, Range, Section); and

Descriptive location (Reference point);

Fire Information;

Acres;

Rate of Spread; and

Wind Conditions.

- B. Contractor's Plan Regarding Personnel.** The Contractor shall, prior to commencing work, furnish the following information relating to key personnel

Title	Name	Address and/or telephone
Fire Supervisor		
Fire Patrolperson		

Section 108. - PROSECUTION AND PROGRESS**108.01 Commencement, Prosecution, and Completion of the Work:** Add the following:

Limit operations as follows:

- (a) Restrict major ground disturbing activities to the dry season, which is defined as May 1-October 31 of each year. Major ground disturbing may occur outside the defined dry season based on a forecast of dry weather and permission from the National Marine Fisheries Service

(NMFS). This restriction does not include work that can be done without major ground disturbing activities, including the following items:

- Minor culverts, where the required excavation is less than 1.5 m in depth, including headwalls, inlets, outlets, and riprap.
- MSE wall work where all of the excavation is performed prior to November 1 of each year and the site is properly shored. Refer to Section 255.
- Minor sub-excavation and shoulder stabilization where the depth does not exceed 1 m.
- Other activities as approved by the CO.

All activities performed between November 1 and April 30 of each year must be approved by the CO. All requests for work to be performed during this period must be accompanied by an approved, updated construction schedule.

(b) Confine removal or pulverization of existing pavement to a cumulative length not to exceed 3100 meters during construction operations. Do not remove or pulverize the pavement on any portion outside the cumulative length until all portions of the cumulative length have been completed through the finished aggregate base grade including prime coat according to the contract plans and specifications. Additionally, by November 1 of each year, areas opened to construction must have: the existing asphalt in place; the roadway completed through the first lift of asphalt; or temporary asphalt, approved by the CO, placed at no cost to the Government. The CO may increase the limits of removal of existing pavement provided the Contractor can illustrate, by means of construction schedule and current production rates, that the work will meet the above requirements and will be completed to the finish aggregate base and prime coat by November 1 of each year. This restriction does not preclude the Contractor from performing work outside of the existing pavement in areas beyond the cumulative length. Culverts and MSE wall installations outside of the cumulative length may be constructed, as approved by the CO, on a site-by-site basis and will require placement of temporary pavement upon completion of each installation at no cost to the government. Any temporary alignment shifts at uncompleted MSE wall locations will require temporary asphalt concrete pavement prior to November 1 of each year. Temporary Asphalt Concrete Pavement must be placed at a minimum of 75mm thickness, must conform to the widths in Subsection 156.04 (g), and conform to the requirements of Section 404, Minor Hot Asphalt Concrete.

Do not remove or pulverize existing or temporary pavement between November 1 and April 30 of each year without prior approval from the CO.

All damaged pavement within the project limits must be patched or repaired prior to November 1 of each year and maintained (patched or repaired) throughout the winter at no cost to the Government. Patch or repair all damaged pavement according to Section 417 to provide a maintainable temporary roadway surface. Failure to repair damaged pavement, or provide an acceptable temporary paved surface will result in suspension of the project work in accordance with Subsection 108.05 until all pavement deficiencies have been corrected. The Government may elect to pave any deficient areas and back charge the Contractor for the work.

(c) Perform no work except to maintain traffic control devices, erosion control devices, the roadway driving surface, and to control dust during the following dates, Sundays and the listed Federal holidays / special events and surrounding days:

- Memorial Day Weekend: 11:30 am Friday to 7:30 am Tuesday.
- Independence Day: 11:30 am July 3 to 7:30 am July 5.
If July 4 falls on a weekend, Friday, or Monday, do not work the weekend.
- Labor Day Weekend: 11:30 am Friday to 7:30 am Tuesday.
- Thanksgiving: 11:30 am Wednesday to 7:30 am Monday.
- Christmas/New Years Holiday: 11:30 December 23 to 7:30 am January 2.
If December 23 or January 1 falls on a Monday, do not work the adjacent weekend and do not work on December 23. If January 1 falls on a Friday, do not work the weekend.
- Trinity County Fair Weekend: 11:30 am Friday to 7:30 am Monday. Fair is held the weekend preceding Labor Day each year.
- Hayfork High School Homecoming Weekend: 11:30 am Friday to 7:30 am Monday.
Homecoming is typically held at the beginning of October. Contact the Hayfork High School for more information.
- Hyampom Good Times Fair Weekend: 7:00 pm Friday to 7:30 am Monday. This event will be Saturday, September 6, 2008. Dates for future events will need to be determined.
- Hyampom Pie Auction Weekend: 7:00 pm Friday to 7:30 am Monday. This event is typically held in March.

During the above times, allow traffic to pass through the construction without delay.

(d) It is anticipated that temporary traffic signals and/or signing will be required during construction to maintain a one-way operation.

(e) Provide the Government up to date construction information, future work and restrictions / delays, and coordinate with emergency services as directed.

(f) Schedule at least 2 non-work days out of every 14 calendar days. The selected non-work days do not need to be consecutive, but they must be scheduled. Provide at least 2 weeks notice before changing the scheduled days off.

Exemptions to scheduled days off may be granted by written approval from the CO for specific project operations and/or for periods of limited duration.

(g) A Notice to Proceed must be issued before commencement of any work. The count of contract time will begin upon issuance of the Notice to Proceed and shall run continuously until final construction completion.

(h) Trinity County will be administering a construction contract on Hyampom Road from milepost 6.6 to 8.3 and is anticipating beginning in the late fall 2009 or spring of 2010.

108.04 Failure to Complete Work on Time. Delete Table 108-1 and substitute the following:

Table 108-1	
Charge for Liquidated Damages for Each Day Work is Not Substantially Complete (Daily Charge)	\$4,500.00

Section 109. - MEASUREMENT AND PAYMENT**109.06 Pricing of Adjustments.** Add the following**ASPHALT CEMENT PRICE ADJUSTMENT PROVISION**

GENERAL. The Asphalt Cement Price Adjustment Provision contained herein provides for a price adjustment in the form of payment to the Contractor or a rebate to the Government for fluctuations in the cost of asphalt cement consumed in the performance of applicable construction work for CA 114-1(1), Hyampom Road. The price adjustment provisions are applicable only to the asphalt cement, as defined in Section 702.01, and incorporated in the following eligible contract pay items:

- 40101-0500 Superpave pavement, 12.5mm nominal maximum size aggregate, <0.3 million ESAL or 40201-3800, Hot Asphalt Concrete Pavement, Hveem Test, Class B, Grading E

The price adjustment provisions are also applicable to these eligible pay items when the Government adds extra work to the Contract.

The provision will remain in effect throughout the duration of the contract. Enactment of the Asphalt Cement Price Adjustment Provision will only be considered when the **increase or decrease** in the price of asphalt cement as defined herein exceeds 10 percent.

The Asphalt Cement Price Adjustment Provision is intended to reduce but not eliminate the cost effects of price uncertainty to the Contractor and the Government for asphalt cement used in the construction of this contract. It provides for sharing by the Government in a portion of the Contractor's risk, which could result from unusual price fluctuations. The provision is not intended to compensate the Contractor for normal day-to-day fluctuations and seasonal changes or to serve as a guarantee of full compensation for asphalt cement price fluctuations.

PRICE INDEXES. The Government will post a monthly performance price index at <http://www.cflhd.gov/procurement/construction/price-indexes/> for asphalt cement using price data obtained from Poten and Partners, Inc. (PPI), which publishes a weekly report (Asphalt Weekly Monitor) on high and low selling prices for states in five regions throughout the United States including the East Coast/Northeast, the Mid-Continent/Midwest, the Gulf Coast/Mid South, the Rocky Mountains and the West Coast/Northwest. Weekly high and low selling price data reported for *West Coast/Northwest California* will be averaged and used to establish a base

price index, BPI, for this project and a monthly performance price index, MPPI, for the duration of the contract. These indexes are defined as follows:

- **BASE PRICE INDEX** The base price index, BPI, is the price index posted by the Government as determined by arithmetic average, as shown in four weekly publications preceding the bid opening. The BPI will be posted a week prior to bid opening on the website reference in the previous paragraph.
- **MONTHLY PERFORMANCE PRICE INDEX.** The monthly performance price index, MPPI, is the monthly price index at the time of performance of applicable work as determined by arithmetic average, as specified above, shown in the four weekly publications issued prior to the last Wednesday of the month (i.e. the monthly performance price index during which asphalt cement is used in the performance of applicable construction work).

PRICE ADJUSTMENTS Price adjustments are calculated by the Government for average conditions and are not intended to reflect the Contractor's actual purchase price. The ratio of the monthly performance price index and the base price index (MPPI/BPI) is calculated and used to determine price adjustments as follows:

- **No Price Adjustment** – When the ratio MPPI/BPI falls within the range of 0.90 to 1.10, no price adjustment will be made for any asphalt cement used in construction work performed during the relevant month.
- **Government Rebate** – When the ratio MPPI/BPI is calculated to be less than 0.90, the Government is due a rebate determined in accordance with the following formula:

$$\text{Government Rebate} = [0.90 - (\text{MPPI/BPI})] (\text{BPI}) (Q)$$

- **Contractor Payment** - When the ratio MPPI/BPI is calculated to be greater than 1.10, the Contractor is due additional payment determined in accordance with the following formula:

$$\text{Contractor Payment} = [(\text{MPPI/BPI}) - 1.10] (\text{BPI}) (Q)$$

The following definitions are applicable to both the Government Rebate and the Contractor Payment formulas:

MPPI = Monthly Performance Price Index for the month during which asphalt cement is used in the performance of applicable construction work.

BPI = Base Price Index that is established immediately preceding the bid opening.

Q = Quantity in metric tons of asphalt cement for eligible pay items that were used on the project during the progress payment period. The quantity will be calculated using the asphalt content of the approved mix design and the following formula:

$$Q = \text{Asphalt Concrete Pavement metric tons placed} \times (\% \text{ Asphalt}/100)$$

PRICE ADJUSTMENT COMPENSATION. Monthly adjustments will be accrued. The final price adjustment will be paid, or rebated, after completion of all work for eligible pay items. The Contractor may request in writing a partial price adjustment payment once every 12 months, or when the unpaid accrued increase exceeds \$10,000. The Government will take a rebate when the deductive accrual exceeds \$10,000.

No price adjustments will be made for work performed beyond the Government-approved Contract completion date.

The maximum allowable monthly and final price adjustment to the Contractor or rebate to the Government is limited to a (MPPI/BPI) ratio of 1.6 and 0.4, respectively.

FUEL PRICE ADJUSTMENT PROVISION

GENERAL. The Fuel Price Adjustment Provision contained herein provides for a price adjustment in the form of payment to the Contractor or a rebate to the Government for fluctuations in the cost of diesel fuel consumed in the performance of applicable construction work for CA 114-1(1), Hyampom Road. The price adjustment provisions are applicable only to contract items listed as eligible pay items in Table 1 below, if diesel is used as the primary fuel in the production of the affected items. The price adjustment provisions are also applicable to these eligible pay items when the Government adds extra work to the Contract.

The provision will remain in effect throughout the duration of the contract. Enactment of the Fuel Price Adjustment Provision will only be considered when the **increase or decrease** in the price of motor fuel as defined herein exceeds 10 percent.

The Fuel Price Adjustment Provision is intended to reduce but not eliminate the cost effects of price uncertainty to the Contractor and the Government for motor fuel used in the construction of this contract. It provides for sharing by the Government in a portion of the Contractor's risk, which could result from unusual price fluctuations. The provision is not intended to compensate the Contractor for normal day-to-day fluctuations and seasonal changes or to serve as a guarantee of full compensation for motor fuel price fluctuations.

PRICE INDEXES The Government will post a monthly performance price index at <http://www.cflhd.gov/procurement/construction/price-indexes/> for California Air Resource Board, Gross Ultra Low Sulfur, No. 2 Diesel Fuel using price data obtained from the Oil Price Information Service (OPIS), which publishes a weekly Newsletter on distillate wholesale rack prices for major cities throughout the United States. The OPIS 5-Day Newsletter average rack

price reported for the Rack City of Eureka, California will be averaged and used to establish a base price index, BPI, for this project and a monthly performance price index, MPPI, for the duration of the contract. These indexes are defined as follows:

- **BASE PRICE INDEX** The base price index, BPI, is the price index posted by the Government as determined by arithmetic average, as shown in four weekly publications preceding the bid opening. The BPI will be posted a week prior to bid opening on the website reference in the previous paragraph.
- **MONTHLY PERFORMANCE PRICE INDEX.** The monthly performance price index, MPPI, is the monthly price index at the time of performance of applicable work as determined by arithmetic average, as specified above, shown in the four weekly publications issued prior to the last Wednesday of the month (i.e. the monthly performance price index during which motor fuel is consumed in the performance of applicable construction work).

PRICE ADJUSTMENTS. Price adjustments are calculated by the Government for average conditions and are not intended to reflect the Contractor's actual purchase price. The ratio of the monthly performance price index and the base price index (MPPI/BPI) is calculated and used to determine price adjustments for eligible pay items as follows:

- **No Price Adjustment** – When the ratio MPPI/BPI falls within the range of 0.90 to 1.10, no price adjustment will be made for any motor fuel consumed in construction work performed during the relevant month.
- **Government Rebate** – When the ratio MPPI/BPI is calculated to be less than 0.90, the Government is due a rebate determined in accordance with the following formula:

$$\text{Government Rebate} = [0.90 - (\text{MPPI/BPI})] (\text{BPI}) (Q) (\text{FUF})$$

- **Contractor Payment** - When the ratio MPPI/BPI is calculated to be greater than 1.10, the Contractor is due additional payment determined in accordance with the following formula:

$$\text{Contractor Payment} = [(\text{MPPI/BPI}) - 1.10] (\text{BPI}) (Q) (\text{FUF})$$

The following definitions are applicable to both the Government Rebate and the Contractor Payment formulas:

MPPI = Monthly Performance Price Index for the month during which motor fuel is consumed in the performance of applicable construction work.

BPI = Base Price Index that is established immediately preceding the bid opening.

Q = Quantity of work on the project during the progress payment period for eligible pay items shown in Table 1 below. The Government, to agree with the units associated with the applicable Fuel Usage Factor, will convert work quantities, as necessary.

FUF = Fuel Usage Factor shown in Table 1 below applicable to both diesel and gasoline.

Table 1 – Eligible Pay Items For Price Adjustments and Associated Fuel Usage Factors		
Eligible Pay Items	Fuel Usage Factor U.S. Customary Units	Fuel Usage Factor Metric Units
Earthwork:		
Section 204 – Excavation and Embankment		
20401 Roadway excavation	0.30 gallons per cubic yard	0.39 gallons per cubic meter
Aggregate Courses:		
Section 301 – Untreated Aggregate Courses		
30101 Aggregate base	0.70 gallons per ton	0.77 gallons per metric ton
Asphalt Pavements:		
Section 401 – Superpave Hot Asphalt Concrete Pavement		
40101 Superpave pavement	2.40 gallons per ton	2.65 gallons per metric ton
Section 402 – Hot Asphalt Concrete Pavement by Hveem or Marshall Mix Design Method		
40201 Hot asphalt concrete pavement, Marshall or Hveem test	2.40 gallons per ton	2.65 gallons per metric ton
<ul style="list-style-type: none"> The Government, to agree with the units associated with the applicable Fuel Usage Factor, will convert work quantities, as necessary. All other contract items are exempt from this fuel escalation clause. Therefore, no adjustments will be made for those items. 		

PRICE ADJUSTMENT COMPENSATION. Monthly adjustments will be accrued. The final price adjustment will be paid, or rebated, after completion of all work for eligible pay items. The Contractor may request in writing a partial price adjustment payment once every 12 months, or when the unpaid accrued increase exceed \$10,000. The Government will take a rebate when the deductive accrual exceeds \$10,000.

No price adjustments will be made for work performed beyond the Government-approved Contract completion date.

The maximum allowable monthly and final price adjustment to the Contractor or rebate to the Government is limited to a (MPPI/BPI) ratio of 1.6 and 0.4, respectively.

109.08 Progress Payments.

(b) Closing date and invoice submittal date. Delete the last sentence and substitute the following:

Submit invoices to the designated billing office by the 7th day after the closing date. Invoices received by the designated billing office after the 16th day following the closing date will not be accepted for payment processing that month. Include late, unprocessed invoice submittals in the following month's invoice.

(e) Processing progress payment requests.

(1) Proper invoices. Delete the title and text and substitute the following:

(1) Invoices received by the 7th day following the closing date.

(a) Proper invoices. If the invoice meets the requirements of Subsection 109.08(c), and the quantities and unit prices shown on the Contractor's invoice agree with the corresponding quantities and unit prices shown on the Government's receiving report, the invoice will be paid.

(b) Defective invoices. If the invoice does not meet the requirements of Subsection 109.08(c), or if any of the quantities or unit prices shown on the Contractor's invoice exceed the corresponding quantities and unit prices shown on the Government's receiving report, the invoice will be deemed defective and the Contractor so notified according to FAR Clause 52.232-27(a)(2). Defective invoices will not be corrected by the Government and will be returned to the Contractor within 7 days after the Government's designated billing office receives the invoice.

Revise and resubmit returned invoices by the 18th day following the closing date. The CO will evaluate the revised invoice. If the invoice still does not meet the requirements of Subsection 109.08(c), the Contractor will be so notified according to FAR Clause 52.232-27(a)(2), and no progress payment will be made that month. Correct the deficiencies and resubmit the invoice the following month.

If the revised invoice meets the requirements of Subsection 109.08(c), but still had quantities or unit prices exceeding the corresponding quantities and unit prices shown on the Government's receiving report, the Government's data for that item or work will be used. The Contractor's invoice, as revised by the Government's receiving report, will be forwarded for processing by the 23rd day following the closing date. The Contractor will be notified by the 23rd day following the closing date of the reasons for any changes to the invoice.

(2) Defective invoices. Delete the title and text and substitute the following:

(2) Invoices received between the 8th and 16th day following the closing date.

(a) Proper invoices. If the invoice meets the requirements of Subsection 109.08(d), and the quantities and unit prices shown on the Contractor's invoice agree with the corresponding quantities and unit prices shown on the CO's receiving report, the invoice will be deemed proper and forwarded for processing within 7 days of receipt.

(b) Defective invoices. If the invoice does not meet the requirements of Subsection 109.08(d), the invoice will be deemed defective, the Contractor so notified according to FAR Clause 52.232-27(a) (2), and no progress payment will be made that month. Correct the deficiencies and resubmit the invoice the following month.

If the invoice meets the requirements of Subsection 109.08(d), but has quantities or unit prices exceeding the corresponding quantities and unit prices shown on the Government's receiving report, the Government's data for that item of work will be used. The Contractor's invoice, as revised by the Government's receiving report, will be forwarded for processing within 7 days of the Government's receipt of the invoice. The Contractor will be notified of the reasons for any changes to the invoice.

(f) Partial payments. Add the following after the first paragraph:

Partial payments for stockpiled manufactured material (aggregates) will be based on Contractor process control test results. If test results show the material to be out-of-specification, or in "reject" where statistical evaluation procedures are used, no payment for stockpiled materials will be made.

Section 152. - CONSTRUCTION SURVEY AND STAKING

Construction Requirements

152.02 General. Delete the first paragraph and substitute the following:

The Government will furnish to the Contractor one copy of each of the following information:

- 3D coordinates and offset distance from centerline for subgrade and surface course finishing stakes at 20-meter intervals and miscellaneous intermediate stations.
- Slope stake books containing centerline grade and slope staking information at 20-meter station intervals and miscellaneous intermediate stations.

- Computer listings containing: horizontal alignment, vertical alignment, earthwork quantities, and staking details showing superelevation template data and slope information.

The Government will provide files for downloading 3D data. Following is the information that will be provided electronically:

- 3D coordinates of control points.
- 3D coordinates of grade finishing stakes.
- 3D coordinates of slope stakes

The Government will perform the following:

- Establish basic survey control points for vertical and horizontal control of the project
- Set clearing stakes at approximately 20 m intervals

Delete the second sentence of the second paragraph and substitute the following:

Reestablish missing control points before slope staking begins.

Add the following:

Furnish a practicable schedule of staking activities with the construction schedule submitted according to Section 155. Include the dates and sequence of staking requirements.

152.03 Survey and Staking Requirements.

(a) Control Points. Delete the text and substitute the following:

Relocate initial horizontal and vertical control points in conflict with construction to areas that will not be disturbed by construction operations. Furnish the coordinates and elevations and all supporting documentation for the relocated points before the initial points are disturbed.

(b) Roadway cross-sections. Delete the text and substitute the following:

Take roadway cross-sections when required to re-catch slope stakes according to 152.03(c).

Take roadway cross-sections normal to centerline. Along each cross-section, measure and record points at breaks in topography, but no farther apart than 5 meters. Space the points so that the maximum variation in vertical distance from a straight line between two consecutive points and the ground line does not exceed ± 0.2 meters. Measure and record points to the anticipated slope stake and reference locations or beyond. Reduce all cross-section distances to horizontal distances from centerline.

Submit one printed copy and one electronic file of the cross-sectional data in GEOPAK ASCII text format: station, offset, elevation, north coordinate, east coordinate, p-code text format.

Include a file header that defines the data type of the column. (Contact Central Federal lands Survey Manager, at 720-963-3700 for more information on the format.) Include one observation per line in the submitted files showing the following data:

Station (nominal), offset from centerline, elevation, north coordinate, east coordinate, p-code (Feature code: RH for reference hub, CL for centerline).

(c) Slope stakes and references. Delete the first sentence and substitute the following:

Set slope stakes and references on both sides of centerline at the stations listed in the government provided slope stake books.

(d) Clearing and grubbing limits. Delete the text and substitute the following:

Clearing and grubbing limits will be set by the government. Reset clearing and grubbing limits as required by changes in the slope stakes.

(f) Grade finishing stakes. Delete the third paragraph and substitute the following:

The maximum longitudinal spacing between stakes is 10 meters when the centerline curve radius is less than or equal to 75 meters. When the centerline curve radius is greater than 75 meters, the maximum longitudinal spacing between stakes is 20 meters. The maximum transverse spacing between stakes is 10 meters. Reset grade finishing stakes as many times as necessary to construct the subgrade and each aggregate course. Use brushes or guard stakes at each stake.

(g) Culverts. Delete the title and first paragraph and substitute the following:

(g) Drainage structure.

Stake culverts to fit field conditions. The location of culverts may differ from the plans. Perform the following for any culvert that does not match the plans within the following tolerances or those established in Table 152-1:

Description	Tolerance
Slope	within 2 percent of plan slope
Skew	within 10 degrees of plan skew
Length	within 10 percent of plan length

(4) Add the following:

(a) For single skewed culverts, also submit a plotted field design cross-section, normal to roadway centerline, at each end section. Plot the offset and elevation of natural ground at the end section and at all proposed template break points between

centerline and the end section. Ensure the template design embankment slope is not exceeded.

(b) For multiple skewed culverts, also submit a plotted field design cross-section, normal to roadway centerline, at the end sections (left and right) nearest to the shoulder. Plot the offset and elevation of natural ground at the end section and at all proposed template break points between centerline and the end section. Ensure the template design embankment slope is not exceeded.

(5) Add the following:

Plot at a scale of 1:100.

Add the following:

(8) When the field design has been approved, set culvert survey stakes, reference stakes, and stake inlet and outlet ditches to make the culvert, including end treatments (e.g., drop inlets) functional.

(9) Adjust slope stakes to provide for catch basins (and transitions into and out of catch basins) which correspond to the final culvert location and design. If the culvert was moved from location shown in the plans, review the slope stakes in the vicinity of the plan location and adjust the slope stakes to remove the planned catch basin.

(I) Miscellaneous survey and staking. Delete the text and substitute the following:

Perform all surveying, staking, recording of data, and calculations necessary for establishing the layout, control, and measurement required to construct the project. Perform the work in such a manner as to ensure the contract work is constructed in the proper location and to the required tolerances. Where staking increments are not identified, propose appropriate staking increments to the CO for acceptance.

Staking notes will not be provided for the wetland mitigation area. Perform all surveying, staking, recording of data, and calculations necessary for establishing the layout, control, and measurement required to construct the wetland mitigation site.

Replace the following tolerances in Table 152-1:

Table 152-1		
Construction Survey and Staking Tolerances		
Staking Phase	Horizontal	Vertical
Delete the following row: Cross-section points and slope stakes ⁽⁵⁾	±50 mm	±50 mm
Add the following row: Cross-section points ⁽⁵⁾	±50 mm	±50 mm
Add the following row: Slope Stakes	±300 mm	±150 mm
Delete the following row: Culverts, ditches, and minor drainages	±50 mm	±20 mm
Add the following row: Ditches	±50 mm	±20 mm
Add the following row: Culverts and minor drainages	±3 meters	±300 mm

Measurement

152.05 Delete the fourth paragraph and substitute the following:

Measure miscellaneous survey and staking by the lump sum for work at the wetland mitigation site only, do not measure miscellaneous survey and staking for any other locations.

Section 153. - CONTRACTOR QUALITY CONTROL

Construction Requirements

153.02 Contractor Quality Control Plan. Delete the first sentence of the first paragraph and substitute the following:

Do not begin any on-site work without an accepted quality control plan.

(a) Process control testing. Add the following:

See Table 153-1 for schedule of minimum sampling and testing for process control. Where no minimums are specified, submit proposed tests to be performed and the proposed sampling and testing frequencies.

For aggregates and/or aggregate/asphalt mixtures accepted under Subsection 106.03, sample and test for conformity with the Certification a minimum of one time per pay item.

(b) Inspection/control procedures.**(3) Production phase.** Add the following:

(d) Inspect the work, materials or assemblies accepted under Subsection 106.03 to ensure that **all** the work and materials comply with contract requirements. Furnish the results of the work inspection, along with the product certification or commercial certification as applicable, to the CO prior to incorporating the materials into the work.

(c) Description of records. Add the following:

Identify the format for reporting test results, materials certifications and the procedures to be used to maintain inspection records.

(d) Personnel qualifications.**(1)** Add the following:

Designate a Quality Control Supervisor (QCS) whose primary responsibility is managing the inspection system. The QCS will not be the Contractor's Superintendent. Designate a QCS with five years experience with similar projects and work to perform and supervise all work inspection, sampling and testing. The QCS will monitor all phases of the work and identify deficiencies and take appropriate corrective action.

Add the following:

(3) Personnel assigned to sampling or testing will have 1 year or more of recent job experience in the type of sampling and testing required by the contract, and the following:

(a) NICET Level II certification in highway materials, or State (SHA) or industry certification-related sampling and testing equivalent to their intended responsibilities.

(b) WAQTC or other nationally accepted certification program for intended sampling and testing responsibilities.

or

(c) Current or previous employment by an AASHTO accredited laboratory performing sampling and testing equivalent to their intended responsibilities.

(d) Demonstrated proficiency or successful testing of one or more proficiency samples may be substituted for basic qualifications pending verification of test results.

153.03 Testing. Delete the title and text and substitute the following:

153.03 Sampling and Testing. Perform the work required by Table 153-1 and by the accepted Quality Control Plan.

(a) Acceptance sampling. Acceptance sampling schedules and times or locations will be provided by the CO. Use a procedure for random sampling. In addition, sample any material that appears defective or inconsistent with similar material being produced, unless such material is voluntarily removed and replaced or otherwise corrected.

(b) Testing. If the Government-furnished field laboratory option is not exercised by the CO, furnish a laboratory equipped with all test equipment necessary to satisfy the requirements of the contract. Ensure test equipment has been checked, calibrated, standardized and/or otherwise verified in accordance with AASHTO and ASTM standards by an individual qualified to do this work. Ensure mobile laboratories receive an equipment inspection after the laboratory has been moved to its permanent location on the project site and anytime it is moved thereafter. Inspect equipment within 45 days of actual use in project testing and at least once a year thereafter. Do not use equipment that has not been inspected or is found to be deficient. Mark deficient equipment and take it out-of-service until it is repaired or replaced and shown by subsequent inspection to perform as required. Maintain records documenting these inspections in the laboratory. Provide certification(s) stating the equipment conforms to testing requirements and provide evidence of current inspection.

The CO may require the Contractor to perform testing to demonstrate acceptable equipment and an acceptable level of technician competence. The CO may also check equipment and inspection records to verify condition. Repair or replace equipment not meeting applicable requirements. Keep laboratory facilities clean and maintain equipment in proper working condition. Provide the CO unrestricted access to the laboratory for inspection and review.

(c) Certifications. For materials accepted by certification in accordance with 106.03, review all certifications to insure compliance with the requirements of the contract prior to incorporating materials into the work and provide a signed copy of the reviewed certification(s) to the CO.

153.04 Records. Add the following to the first paragraph:

When tests are on material being incorporated into the work, report test results within the reporting times indicated in the sampling and testing requirements at the end of each Section or as specified in the contract.

Add the following to the second paragraph:

Detailed inspection results including deficiencies observed and corrective actions taken.

153.05 Acceptance. Add the following:

If chronic deficiencies are noted in the Contractor's inspection or testing systems, the CO may order supplemental inspection and/or testing to be performed. The Government will charge to the Contractor all costs associated with such supplemental inspection or testing.

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 204, 208, 209.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Embankment Construction Composition of Roadbed in Cuts	Classification and Moisture/Density	AASTHO M 145 AASHTO T 99 or AASHTO T 180 (minimum of 5 proctor points).	1 per material/type.	Source of material.
	In-place density and moisture content	AASHTO T 310	2 per lift, but not less than 2 every 800 cubic meters.	Compacted embankment, subgrade as applicable.
	R-value	AASHTO T 190 (Tested by FHWA Central Lab).	1 per 700 meters, or change in material type.	Sample depth: 0-300 mm.
Bedding/Backfill for Structures and Culvert Pipe	Classification and Moisture/Density	AASTHO M 145 AASHTO T 99 or AASHTO T 180 (minimum of 5 proctor points).	1 per material/type.	Source of material.
	In-place density and moisture content	AASHTO T 310	1 per 15 meters/lift. Minimum 2 per lift.	Compacted bedding or backfill as applicable.

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 255.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Select wall backfill 704.13(a) and Wall backfill 704.13(b)	Gradation and liquid limit	AASHTO T 11 AASHTO T 27 AASHTO T 89 AASHTO T 90	1 per material/type	Source of material
	Moisture Density	AASHTO T99, Method C ⁽¹⁾	1 per material/type	Source of material
	In-place density and moisture content	AASHTO T 310	For MSE walls: 1 per 300-mm lift per 75-meters of wall length (minimum of 2 per lift)	Compacted backfill

⁽¹⁾ A minimum of 5 points are required for moisture density test.

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 301, 303, 304, 305, 306, 308.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Subbase, Base Course Aggregate Stabilization and Aggregate Topsoil Courses	Gradation (301)	AASTHO T 11 AASTHO T 27	2 per day	Crusher belt
	Moisture/Density	AASHTO T 99 or AASTHO T 180 (minimum of 5 proctor points)	1 per source of material	Source of material
	In-place density and moisture content	AASHTO T 310 or ASTM 2950	2 per lift at 300-meter intervals, alternating lanes	Compacted aggregate
	Plasticity index (aggregate surfacing only)	AASHTO T 90	2 per day	Crusher belt
	Gradation (304 materials processed in place)	AASHTO T 11 AASHTO T 27	1 per 300 meters	Processed material
Magnesium Chloride and Calcium Chloride	Specific Gravity	Hydrometer	1 per shipment	Transport vehicle

Note: Density and Moisture calculations AASHTO T 310...Density corrections based on moisture for recycled materials containing asphalts, or aggregates containing MgCl or CaCl will be made based on samples taken from each test site and oven-dried in the laboratory.

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section: 401.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Superpave Hot Asphalt Concrete Pavement	Gradation	AASTHO T 11 AASHTO T 27	2 per day per stockpile	Crusher belt (during production) and Cold Feed or Hot Bins (as applicable during production of hot mix)
	Moisture content of aggregates	AASHTO T 255	1 per day	Cold Feed (during production of hot mix)
	Compaction	ASTM D2950	Test strip, first day of production to establish roller pattern: 12 per 500 meters, then 3 per 500 meters	In place, after compaction
	Placement temperature	Thermometer	As directed	Behind laydown machine
	Surface tolerance	Straight edge and FLH T 504	During and after compaction	See Subsection 401.16
Aggregate	Fine aggregate angularity	AASHTO T 304, Method A	1 per day	Cold Feed

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 402, 403, 404, 405, 408.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Asphalt Concrete Pavement	Gradation	AASTHO T 11 AASHTO T 27	2 per day per stockpile	Crusher belt (during production) and Cold Feed or Hot Bins (as applicable during production of hot mix)
Open-Graded Asphalt Friction Course	Moisture content of aggregates	AASHTO T 255	1 per day	Cold Feed (during production of hot mix)
Asphalt Base Course	Compaction	ASTM D2950	Test strip, first day of production to establish roller pattern: 12 per 500 meters, then 3 per 500 meters	In place, after compaction
	Placement temperature	Thermometer	As directed	Behind laydown machine
	Surface tolerance	Straight edge and FLH T 504	During and after compaction	See Subsection 401.16

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 409, 410.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Chip seal aggregate	Gradation	AASTHO T 11 AASHTO T 27	2 per day	Production belt or spreader discharge
Slurry seal aggregate	Moisture content of aggregates	AASHTO T 255	1 per day	Stockpile or spreader discharge
Asphalt binder Emulsified asphalt	Placement temperature	Thermometer	Prior to each days production, followed by 2 each day	Distributor truck

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 416, 418.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Continuous Cold Recycled Asphalt Base Course Foamed Asphalt Stabilized Base Course	Gradation	AASHTO T 27 (maximum size only)	1 per 500 meters	Recycled material prior to compaction
	Moisture content	FLH T 515	Minimum 1 per 500 meters alternating lanes (as necessary to comply with contract requirements)	In place after compaction and prior to compaction to determine total moisture.
	In-place density	ASTM D2950	1 per 500 meters, alternating lanes (1 value will be equal to the mean of 3 in-place tests, and as necessary to comply with contract requirements)	In place after compaction

Note: Density and Moisture calculations ASTM D 2950...Density corrections based on moisture for recycled materials containing asphalts, or aggregates containing MgCl or CaCl will be made based on samples taken from each test site and oven-dried in the laboratory.

Table 153-1
Schedule of Minimum Sampling and Testing For Process Control
 (to be performed by the Contractor)

Section(s): 501, 552, 601.

Material	Property or Characteristic	Test Method or Specification	Frequency	Sampling Point
Concrete	Gradation and fineness modulus	AASTHO T 11 AASHTO T 27	1 per day	Aggregate, before batching
	Moisture	AASHTO T 255	1 per day/stockpile	Aggregate, before batching
	Slump	AASHTO T 119	1 per 25 cubic meters, minimum 1 per day	See note
	Air content	AASHTO T 152	1 per 25 cubic meters, minimum 1 per day	See note
	Unit weight	AASHTO T 121	1 per 25 cubic meters, minimum 1 per day	See note
	Temperature	Thermometer	1 per 25 cubic meters, minimum 1 per day	See note
	Making test specimens for compressive strength	AASHTO T 23	1 set per 25 cubic meters, minimum 1 set per day	At point of discharge

Note: If an extended set admixture is used for the sole purpose of extending discharge times, sampling and testing will be performed by the Contractor at point of batching and discharge location to ensure compliance with Subsection 552.08.

Section 154. - CONTRACTOR SAMPLING AND TESTING**Construction Requirements****154.02 Sampling.** Add the following:

Perform the initial curing of all concrete test cylinders. Provide for transporting the cylinders to the FHWA-Central Federal Lands Highway's Laboratory unless other testing facilities are authorized by the CO.

Label each concrete mold with the name and number of the Project, the cylinder number, date molded, location of the sample, and the test age (i.e. – 7, 14, or 28 days). Label the mold after casting and the cylinder after stripping to ensure the sample can be identified throughout the entire curing process.

Provide the required cylinder molds.

154.03 Testing Add the following:

Where Process Control Sampling and Testing frequencies in Table 153-1 are identical to the Sampling and Testing Tables for all applicable work the Process Control Samples may be used for acceptance.

Add the following Subsections:

154.03A Field Laboratory (Government-Furnished). Refer to the “Bid Schedule Instructions” on Page B-0 of this proposal for information regarding the bid alternative for use of a Government-Furnished field laboratory.

If the bid alternative “Item 15401-0000, Contractor Testing, Using Government Furnished Field Laboratory” is **exercised**, the government will provide for the Contractor's use a mobile field laboratory, including testing equipment as follows:

- Ignition Oven
- Convection Oven
- Liquid Limit Machine and Grooving Tool
- 30,000 Gram Balance
- 12,000 Gram Balance
- 4,600 Gram Balance (readable to 0.01)
- Platform Scale
- Mechanical Compactor (Moisture Density) and Accessories
- 8-inch Sieve Shaker and Sieve Stack
- 12-inch Sieve Shaker and Sieve Stack
- Drill Press with Muller
- Large Sample Splitter

- Small Sample Splitter

Provide any additional equipment or facilities necessary to fulfill the requirements of the Contract.

Transport the laboratory from 12300 West Dakota Avenue, Lakewood, CO to the point of use and return the laboratory to the same Lakewood address upon completion of the work. The trailer will be available upon issuance of Notice to Proceed and must be returned no later than 14 days following final acceptance of the contract. Contact the CFLHD Equipment Depot at (720) 963-3459 for specific directions to the laboratory storage location.

Assume responsibility for the replacement of any and all missing or damaged equipment and for the repair of any damage to the laboratory. Replacement cost for missing or damaged equipment or facilities will be deducted from any remaining monies owed the Contractor. If sufficient funds are not available under the Contract for such retention, the Contractor agrees to make payment directly to the Government for any damaged or missing equipment or facilities.

Specifics:

Furnished equipment will be inspected by the Government by checking, standardizing, calibrating and/or verifying, as appropriate, in accordance with applicable AASHTO and ASTM standards. The Government equipment inspection will be completed after the laboratory has been moved to its permanent location on the project site prior to actual use in project testing and at least once a year thereafter. Notify the CO at least 30 days in advance of intent to use the testing equipment on the project so that Government equipment inspection can be scheduled and performed. Assume responsibility for additional equipment inspections prior to the Government's yearly inspection if the mobile laboratory is moved. Maintain records documenting these inspections in the laboratory.

Maintain equipment in proper operating condition. Do not use equipment that is found to be deficient or defective. Mark deficient or defective equipment and take it out-of-service and immediately notify the CO. If Government-furnished testing components fail through no fault or negligence of the Contractor, the Government will replace or repair the equipment in the most expeditious manner practicable. Requests for time extension and/or delay damages will not be granted for delays of less than 48 hours for any one occurrence, or for cumulative delays amounting to less than 5 (five) days in any one 365-day period. Requests for time extensions or damages due to equipment-related delays caused by equipment misuse or other Contractor fault will not be granted.

- Furnish water to the Government-provided field laboratory which is clear and free of oil, acid, rust, alkali, sugar, and vegetable substances. Furnish 120/240-volt, 60-cycle, single-phase current adequate to operate all of the Government field laboratory facilities at all times as required by the CO. Supply enough power to support a 200 amp service panel. Equip the power supply with a regulator that limits the voltage of the power furnished to the laboratory to not less than 220 volts and not more than 240 volts.
- All equipment provided by the Government and replaced by the Contractor will remain with the laboratory and will become the property of the Government.

- Use of the laboratory is limited to testing materials in connection with this contract.

154.03B Field Laboratory (Contractor-Furnished). If the Government-furnished field laboratory bid alternative is not exercised, furnish a laboratory equipped with all test equipment necessary to satisfy the requirements of the contract.

The sampling and testing services of a commercial laboratory meeting or exceeding the requirements described herein may be used if all contract sampling and testing requirements are satisfied by the use of the commercial facility.

Ensure test equipment has been checked, calibrated, standardized and/or otherwise verified in accordance with AASHTO and ASTM standards by an individual qualified to do this work. Ensure mobile laboratories receive an equipment inspection after the laboratory has been moved to its permanent location on the project site and anytime it is moved thereafter. Inspect equipment within 45 days of actual use in project testing and at least once a year thereafter. Do not use equipment that has not been inspected or is found to be deficient. Mark deficient equipment and it take out-of-service until it is repaired or replaced and shown by subsequent inspection to perform as required. Maintain records documenting these inspections in the laboratory. Provide certification(s) stating the equipment conforms to testing requirements and provide evidence of current inspection.

The CO may require the Contractor to perform testing to demonstrate acceptable equipment and an acceptable level of technician competence. The CO may also check equipment and inspection records to verify condition. Repair or replace equipment not meeting applicable requirements. Keep laboratory facilities clean and maintain equipment in proper working condition. Provide the CO unrestricted access to the laboratory for inspection and review.

Section 155. - SCHEDULES FOR CONSTRUCTION CONTRACTS

Construction Requirements

155.02 General. Delete the last sentence of the first paragraph and substitute the following:

Do not begin any on-site work unless a preliminary 45-day construction schedule has been submitted to the CO. If circumstances cause work to begin after the initial 45-day construction schedule has expired, do not begin on-site work until a revised baseline construction schedule has been submitted to the CO.

Delete the first sentence of the third paragraph and substitute the following:

Use the Critical Path Method (CPM) described below to develop the construction schedule for the total contract work.

Delete the last sentence of the last paragraph and substitute the following:

The baseline construction schedule must show all work completed within the time provided in the contract.

155.03 Bar Chart Method (BCM). Delete the subsection.

155.04 Critical Path Method. Add the following after the first sentence of the first paragraph:

Use an approved computer program version of the Critical Path Method (CPM) described below to develop the construction schedule for the total contract work. Provide a legal copy of the program for use by the CO. The CO will return the program to the Contractor upon completion of the contract. Provide the baseline schedule and subsequent updates on compact disk and hard copy to the CO for use during the contract.

155.05 Written Narrative.

(d) Delete the text and substitute the following:

Describe planned production rates of each activity in rate per day or hour (e.g. cubic meter excavation per day).

(e) Delete the text and substitute the following:

Describe work days per week, holidays, number of shifts per day, number hours per shift for each work activity.

Add the following:

(j) List anticipated monthly and cumulative contract earnings (including, for schedule updates, any contract modifications) for each month from the beginning of construction operations through the completion of the work. Calculate and list each month's anticipated earnings through the close of business on the date provided by the CO as the cut-off date for monthly project pay estimates.

(k) Explain logic of all activities that has changed from the logic in original baseline schedule.

155.06 Schedule Updates. Delete the first sentence of the second paragraph and substitute the following:

Each construction schedule revision will be a revised version of the accepted initial construction schedule. Provide 3 hard copies and an electronic version of the revised construction schedule on compact disc to the CO at least every 30 days or when:

Section 156. - PUBLIC TRAFFIC

Construction Requirements

156.03 Accommodating Traffic During Work. Delete the last two sentences of the first paragraph and substitute the following:

Submit situation-specific traffic control implementation drawings and alternate traffic control proposals according to Subsection 104.03 for acceptance at least 14 days before intended use.

Add to following:

Provide access through the work zone immediately upon arrival at the job site for emergency vehicles, including those carrying County, State and U.S. Government personnel responding to emergency situations. Be prepared at all times to immediately cease construction operations and restore the roadway such that emergency passage can be afforded such vehicles at any time regardless of the traffic control plan in effect.

Allow for the passage of the mail delivery service vehicles and the local school bus. Coordinate with these services to ensure that the closure schedule will allow for passage through the construction area without delay. The contacts for these services are as follows:

- Mountain Valley Unified School District, Transportation Manager 530-628-5488
- United States Postal Service, Hyampom Postmaster (530) 628-5955

156.04 Maintaining Roadways During Work.

(a) Add the following:

Do not construct diversions outside of the clearing limits or use alternate route detours without the approval of the CO.

(c) Add the following:

Coordinate with Trinity County the snow removal from Forest Road 2N10 from Hayfork to the intersection with Hyampom Road and along Corral Bottom Road from Hyampom to Big Bar as required prior to any closure after May 1 longer than 30 minutes on Hyampom Road. These roads need to be passable by the public, as approved by the CO, prior to closures longer than 30 minutes on Hyampom Road.

(g) Add the following:

For alternate one-way traffic control, provide a minimum lane width of 2.4 meters (2.7 meters desirable). For two-way traffic, provide the full width of the existing roadway or a minimum roadway width of 6.0 meters. Where traffic barrier is used provide an additional 300-millimeter offset to the traveled way from the barrier. At all times, provide enough width, particularly at tight curves, for safe passage of the school bus.

156.05 Maintaining Roadway During Non-Work Periods. Add the following:

Unless shown in the temporary traffic control plans or as approved by the CO, maintain continuous two-way traffic during non-work periods. For two-way traffic, provide a minimum roadway width of 6.0 meters. For two-way traffic where the existing road width does not meet a minimum width of 6.0 meters, provide the entire width of the existing road.

Provide temporary traffic control (temporary traffic signal or “Stop, Proceed when clear” signs) as approved by the CO in construction areas where the existing roadway or a minimum width of 6.0 meters is not provided. For alternate one-way traffic control, provide a minimum lane width of 2.7 meters. Where traffic barrier is used provide an additional 300-millimeter offset to the traveled way from the barrier. Provide at a minimum a paved or well-graded, compacted surface for public traffic during all non-work periods.

156.06 Limitations on Construction Operations.**(i) Delete the text and substitute the following:**

Limit operations per Section 108.01 and the following closure schedule:

From May 1 to October 31 for each year

- Road may be closed Monday through Friday from 7:30 am to 11:30 am and Monday through Wednesday and Friday from 1:00 pm to 4:00 pm.
 - Limit construction caused delays to public traffic to a maximum of 30 minutes per passage through the project when the following operations are occurring in order to minimize the delay to the public:
 - Surveying
 - Clearing and grubbing
 - Paving
 - Striping
 - Guardrail and sign installation
 - Obtain approval from the CO for closures longer than 30 minutes while these operations are still occurring.
- Allow traffic through the project from 11:30 am to noon and 12:30 pm to 1:00 pm. Operation may vary depending on use of flaggers and/or pilot cars. See discussion on USPS delivery and school bus below.
- Limit construction caused delays to public traffic to a maximum of 30 minutes per passage through the project during the following times:

- Thursdays from 1:00 pm to 4:00 pm
- Monday through Friday 4:00 pm to 7:00 pm
- Saturdays from 7:30 am to 7:00 pm

From November 1 to April 30 of each year

- Limit construction caused delays to public traffic to a maximum of 30 minutes per passage through the project during the following times:
 - Monday through Saturday 7:00 am to 4:00 pm

Allow traffic to pass through the construction without delay at all other times.

Limit the wait time for the United States Postal Service (USPS) and school bus at all times. The current schedule of USPS truck is that it reaches the project heading westbound at approximately 11:30am and returns through the project heading eastbound at approximately 12:45 pm. The current schedule of the school bus is that it goes to Hyampom and returns to Hayfork by 7:30 am. In the afternoon it reaches the project heading westbound at approximately 4:00 pm and on the return to Hayfork reaches the project at approximately 4:45 pm. Every other Thursday the bus leaves school at 1:10 pm, reaching the project at approximately 1:50, and returning through the project at approximately 2:45 pm. Contact information is provided in Section 108 for coordination with the USPS and school district to limit their wait times.

Limit alternate one-way operations, with flaggers only, to a maximum of two separate operations with a maximum total combined length of 1200-meters. Delays to public traffic will be measured from one end of the project to the other.

(k) Add the following:

Limit the length of area affected as approved by the CO. See Subsection 108.01 for limitations on work.

156.07 Nighttime Operations. Delete the first paragraph and substitute the following:

Perform construction operations from 7:30 am, or ½ hour after sunrise (whichever is later), to 7:00 pm, or ½ hour before sunset (whichever is earlier).

Nighttime operations may be permitted on a limited basis by approval from the CO in accordance with Section 156.03

Section 157. - SOIL EROSION CONTROL**Construction Requirements****157.03 General.** Delete the second paragraph and substitute the following:

Standard erosion control devices are provided in the contract. Detail site-specific measures for controlling erosion and submit to the CO for acceptance prior to implementation. Provide working drawings and associated data that do not exceed 610 by 920 millimeters in size. Allow 7 days for acceptance of the drawings or a return for corrections. Include the following in the detailed design:

- (1) Address contractual requirements for storm water runoff permits, environmental commitments, and other permit requirements here or in Subsection 107.01 or 107.10.
- (2) Location of each proposed erosion control measure.
- (3) Type of each erosion control measure.
- (4) Quantities and estimated unit costs of proposed temporary erosion control devices to be implemented during construction.
- (5) A schedule detailing coordination of erosion control measures with the various construction operations or stages. Include the furnishing, installation, maintaining, and removing of temporary devices and the installation of permanent erosion control features.
- (6) A schedule outlining the proposed schedule of clearing and grubbing, excavation, embankment, and culvert operations such that the area of disturbed or erodible material is minimized. Schedule the work such that temporary and permanent erosion measures can be incorporated at the earliest practical time.
- (7) Construction methods used in various items of work to minimize erosion.

Add the following:

At least 5 days prior to the preconstruction conference, designate in writing an Erosion Control Supervisor who is responsible for implementing the requirements of this Section. Do not designate the project superintendent as the Erosion Control Supervisor.

When temporary erosion control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls as part of the work in a timely manner, provide temporary measures at no cost to the Government.

157.04 Controls and Limitations on Work. Add the following before the first paragraph:

Do not begin any on-site work until an erosion control plan (SWPPP) has been submitted to and approved by the CO.

157.11 Temporary Turf Establishment. Add the following:

Apply Temporary Turf Establishment to all soil stockpiles remaining in place for 1 month or longer to minimize the growth of noxious weeds.

Delete Table 157-1 and substitute the following:

Table 157-1	
Application Rates for Temporary Turf Establishment	
Material	Application Rate kg/ha
Seed	6 (native seed) 12 (cereal grain)
Fertilizer	375
Mulch	4500

157.12 Inspection and Reporting. Add the following:

Monitor the turbidity of Hayfork Creek adjacent to the project. Take turbidity measurements using an HF-DRT 15CE turbidimeter or equivalent upstream of the project and 150 meters downstream of the area of the highest turbidity. If the measurements show an increase of 10 NTU or more, immediately suspend operations in the vicinity of the problem area and modify the erosion control measures to eliminate the cause of the high turbidity. Include turbidity readings, locations, and actions taken, if any, in inspection reports. Also provide documentation of meter calibration.

157.14 Acceptance. Add the following:

Soil erosion control will be evaluated under Subsection 106.02 based on the demonstrated ability of the erosion control measures to result in minimal soil erosion, sedimentation and/or siltation, and turbidity increases within or adjacent to the project limits.

Measurement**157.15** Delete third paragraph and substitute the following:

Measure temporary turf establishment by the hectare on the ground surface. Measurement to include seed, fertilizer, and mulch.

Section 158. — WATERING FOR DUST CONTROL**Construction Requirements****158.03 General.** Add the following:

(c) Water Drafting. Water drafting is permissible from perennial streams at the following on-site locations:

Dinner Gulch, approximate station 17+755

Big Canyon, approximate station 22+155

Perform water drafting operations in conformance to the following requirements:

1. Operations are restricted to one hour after sunrise to one hour before sunset.
2. Pumping rate shall not exceed 1325 liters per minute (350 gallons per minute) and pumping rate shall not exceed ten percent of the stream flow and flow in the source stream during water drafting will remain at 57 liters per second (2.0 cfs) or greater.
3. Draft from streams and pools where water is deep and flowing, not in streams with low flow and small isolated pools.
4. Pumping shall be terminated when the tank is full. The effect of single pumping operations, or multiple pumping operations at the same location, shall not result in obvious draw-down of either upstream or downstream pools.
 - Each pumping operation shall use a fish screen. The screen face should be oriented parallel to flow for best screening performance. The screen shall be designed and used such that it can be submerged with at least one-screen-height-clearance above and below the screen.
5. Operators shall keep a log on the truck containing the following information: *Operator's Name, Date, Time, Pump Rate, Filling Time, Screen Cleaned (Y or N), Screen Condition, Comments*. These guidelines should be included as instructions in a logbook with serially numbered pages. This assures each truck operator easy access to this information.

For a water diversion that will not meet the above criteria, a water drafting plan shall be prepared and approved by National Marine Fisheries Service through an Agreement pursuant to Section 1600 et seq. of the Fish and Game Code.

Measurement**158.05** Add the following:

Only water ordered by the CO for dust control will be measured for payment. It is the responsibility of the CO and the contractor to determine on a daily basis the number of cubic meters directed and used for dust control.

Payment**158.06** Add the following:

No direct payment will be made for furnishing, hauling and applying water in the performance of work under other Sections of the contract including: pre-wetting of excavation and embankment materials for achieving optimum moisture for placement and compaction.. This water will be considered a subsidiary obligation of the contractor under the applicable contract item(s) of work.

Section 201. — CLEARING AND GRUBBING**Construction Requirements****201.03 General.** Add the following:

Prior to the start of any clearing operations, the Contractor is required to enter into a Forest Service Timber Settlement contract as per Subsection 107.01 of the Special Contract Requirements.

Meet with the CO to approve the clearing limits as staked or get direction on specifically how to adjust the clearing limits to preserve existing vegetation, rock formations, or other features. When directed, re-catch slope stakes at new slope ratio in accordance with Subsection 152.03(c). Re-establish clearing limits and adjust markings on existing trees and vegetation to be removed along the clearing limits, in accordance with the directions of the CO.

If any revisions to the clearing limits are required after they have been approved, schedule another meeting with the CO to review and approve the changes. Maintain the markings and the clearing limit stakes for the duration of the contract. Upon completion of the contract remove all markings and stakes.

201.05 Grubbing. Grub deep enough to remove stumps, roots, buried logs, moss, turf, or other vegetative debris as follows: Add the following:

(e) Stockpile forest duff for use in Zone E of the Wetland Mitigation area. Forest duff will include topsoil, leaves, needles, pine cones and other organic material on the soil surface. Conserve the quantity as indicated in the bid schedule. Place in Wetland Mitigation area as

described in 624.04(b). Duff should be stockpiled so that no decomposition occurs prior to distribution, approximately 1 meter maximum in height.

201.06 Disposal. Add the following after the first sentence and delete the second sentence:

All merchantable timber shall be removed from the project within 30 days of falling. Chip enough non-merchantable timber material (slash) for the manufactured topsoil per Sections 624 and 713. Dispose of remaining clearing and grubbing debris according to Subsection 203.05.

Stockpile approximately ten soft-wood trees no smaller than 250 mm in diameter at the base for placement in Zone E of the Wetland Mitigation area. Place in accordance with Section 624.04(b).

Measurement

201.08 Add the following:

Do not measure chipping for payment. Payment for manufactured topsoil will be made under Section 624.

Section 202. — ADDITIONAL CLEARING AND GRUBBING

Description

202.01 Add the following:

This work also includes the clearing of trees on top of existing cuts which are located outside of the construction limits at the direction of the CO and the removal of “hazard trees” as identified by the CO.

202.02 Definitions.

(a) Selective clearing. Add the following:

Also includes clearing of trees on top of existing cuts at the direction of the CO.

(d) Removal of individual trees or stumps. Add the following:

Removal of individual “hazard” trees at the direction of the CO.

Section 203. - REMOVAL OF STRUCTURES AND OBSTRUCTIONS**Description****203.01** Add the following:

This work also consists of removing and disposing of an existing steel beam retaining wall at approximate stations 20+271 thru 20+277.

Construction Requirements**203.05 Disposing of Material.****(a) Remove from Project.** Add the following:

Secure environmental clearances according to Subsection 107.10.

(c) Bury. Delete the first paragraph and substitute the following:

Bury debris in trenches or pits in approved areas within the right-of-way. Do not bury debris inside the roadway prism limits, beneath drainage ditches, in any area subject to free-flowing water, or in areas where structure foundations are to be constructed.

Add the following:

(e) Approved disposal sites. Wood chips may be disposed of at Forest Service approved disposal sites in accordance with Forest Service standards and regulations.

Section 204. - EXCAVATION AND EMBANKMENT**Construction Requirements****204.05 Conserved Topsoil.** Delete the first sentence and substitute the following:

Conserve topsoil from the roadway excavation and from embankment foundation areas as directed by the CO to the extent and depth determined by the CO.

204.06 Roadway Excavation.**(b) Rock cuts.** Add the following:

When blasting rock, use controlled blasting methods according to Subsection 205.08(c).

204.07 Subexcavation. Delete the fifth sentence and substitute the following:

Backfill the subexcavation with select topping.

204.09 Preparing Foundation for Embankment Construction.

(d) Embankment on an existing slope steeper than 1:6 (1 unit vertical to 6 units horizontal).
Delete the text and substitute the following:

Cut horizontal benches in the existing slope as shown in the plans on detail M204-50A. Bench the slope as the embankment is placed and compacted in layers. Begin each bench at the intersection of the original ground and the vertical cut of the previous bench.

On embankments exceeding 7.2 meters in vertical height, construct a Special Rock Embankment foundation of 2.4 meters minimum in height or as directed by the CO. Construct Special Rock Embankment foundations in accordance to Subsection 252.03 and see also special drawing M204-50A in the plans.

204.14 Disposal of Unsuitable or Excess Material. Delete the text of this Subsection and substitute the following:

Place excess material on suitable sites within project limits as directed by the CO. Excess material may be placed to bury large culvert pipes, Dinner Gulch roadway obliteration areas or other areas approved by the CO.

Dispose of unsuitable or excess material that cannot be wasted on-site legally off the project.

Shape and compact the waste material in its final location. Do not mix clearing or other material not subject to payment with the waste material.

Measurement

204.16

(a) Roadway Excavation.

(1) Include the following volumes in roadway excavation:

(e) Delete the text and substitute the following:

Topsoil stripped from cuts that was directed by the CO to be conserved.

(h) Delete the text and substitute the following:

Conserved material taken from stockpiles and used in Section 204 work except topsoil measured under Section 624. Only materials required to be conserved by the CO are eligible for measurement under this item.

Add the following:

(j) Rock excavation inside the designed slopes used for the production of aggregates

(k) Grading ditches, called out in the plans as “grade to drain”

(l) Excavation for shoulder stabilization

(2) Do not include the following in roadway excavation: Add the following:

(m) Conserved topsoil stripped from fills.

(b) Unclassified borrow, select borrow, and select topping. Add the following:

Do not measure select topping for payment for backfilling subexcavation and shoulder stabilization areas.

(e) Waste. Add the following:

Do not measure excess and unsuitable material wasted within the project limits, only material disposed of off the project.

Payment

204.17 Add the following:

Payment for Item 20401 is limited to ten percent of the plan quantity of excavation in the cut until the slope rounding in that cut is completed.

A price adjustment will be made for fluctuations in the cost of motor fuel (diesel only) consumed in the performance of applicable construction work according to Subsection 109.06 Pricing of Adjustments, Fuel Price Adjustment Provision.

Section 205. — ROCK BLASTING**Description****205.01** Delete the second and third paragraphs and substitute the following:

This project requires carefully planned and uniquely adapted blasting approaches to achieve engineered road cuts that are structurally sound and aesthetically pleasing. Use controlled blasting methods to properly utilize the natural geologic bedding planes and joint structure in a predicted and controlled manner to form the final cut slopes and to minimize back break beyond the trim line.

Controlled blasting consists of the controlled use of explosives and blasting accessories in carefully spaced and aligned drill holes to produce specific shear planes in the rock mass along the predetermined excavation back-slope. Controlled blasting techniques include pre-splitting, cushion blasting, and blasting methods using horizontal holes (all controlled blasting with horizontal holes shall be reviewed by the CO on a per-cut basis).

Production blasting consists of the main fragmentation blasting resulting from more widely spaced production holes. Detonate production holes in a controlled delay sequence to prevent escape of materials outside the construction limit and prevent damage to the natural environment outside the clearing limits from fly rock, operation of equipment, or other construction related causes in accordance with subsection 107.02.

205.04 Blaster-in-Charge. Add the following:

Not less than two weeks prior to commencing drilling and blasting operations, submit the name and experience of the *Blaster-in Charge* with references. Blaster-in-charge shall have all required licensing required by the State and a minimum of 5 years experience in supervising the drilling, loading, and firing of charges for rock slope excavation.

205.05 Blasting Plans. Add the following after the first paragraph:

Formulate blast plans and approaches such that the final cut faces will blend with surrounding natural features of the landscape, such as rock outcrop, draws and slope of terrain. This includes slope warping, laying back draws, forming staggered ridges, and warping the top and/or the toe of the slope.

(a) General Blasting Plan. Add the following:

- (6) Methods to be employed for traffic control and other public safety.
- (7) Equipment intended to be used in or support of blasting operations.
- (8) Method(s) of containment to prevent rock materials flying beyond the construction limits and contingency measures for unanticipated rock falls.

205.09 After Blast Report. Add the following to the first paragraph:

No additional drilling is allowed until the blast report is reviewed by the CO.

Payment**205.12** Delete the text of this Subsection and substitute the following:

The accepted quantities will be paid at the contract price per unit of measurement for the Section 204 pay item listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

Section 207. — EARTHWORK GEOTEXTILES

Delete the text of this Section and add the following:

Description

207.01 This work consists of furnishing and placing a geotextile as a permeable separator, stabilizer, or permanent erosion control measure.

This work also consists of furnishing and placing a geogrid as a soil reinforcement element.

This work also consists of furnishing and placing an impermeable geomembrane liner under the Wetland Mitigation area soil.

Geotextile types are designated as shown in Subsection 714.01.

Material**207.02** Conform to the following Subsection:

Geotextile	714.01
Geogrid	714.03
Geomembrane	725.19

Construction Requirements

207.03 General. Submit test results to the CO verifying the proposed products meet the criteria as outlined in Section 714 and 725.

Where placing a geotextile on native ground, cut the trees and shrubs flush with the ground surface. Do not remove the topsoil and vegetation mat. Remove all sharp objects and large rocks. Fill depressions or holes with suitable material to provide a firm foundation.

Replace or repair all geotextile or geogrid that is torn, punctured, or muddy. Remove the damaged area and place a patch of the same type of geotextile or geogrid by overlapping 0.9 m (3 feet) beyond the damaged area.

Furnish geogrid packaged in a sheathing or container suitable to protect the geogrid from damage due to ultraviolet light during storage and handling. Store, handle, protect, and haul all the materials in accordance with the manufacturer's specifications and as directed by the CO. Furnish geogrid that is visibly labeled with the name of the manufacturer, identification of the geogrid product, date of manufacture, lot number, length, width, and quantity.

207.04 Separation and Stabilization Applications. Where placing a geotextile on a subgrade, prepare the subgrade according to Subsections 204.13(c) and (d).

Place the geotextile smooth and free of tension, stress, or wrinkles. Fold or cut the geotextile to conform to curves. Overlap in the direction of construction. Overlap the geotextile a minimum of 0.6 m (2 feet) at the ends and sides of adjoining sheets, or sew the geotextile joints according to the manufacturer's recommendations. Do not place longitudinal overlaps below anticipated wheel loads. Hold the geotextile in place with pins, staples, or piles of cover material.

End dump the cover material onto the geotextile from the edge of the geo-textile or from previously placed cover material. Do not operate equipment directly on the geotextile. Spread the end-dumped pile of cover material maintaining a minimum lift thickness of 300 mm (12 inches). Compact the cover material with rubber-tired or non-vibratory smooth drum rollers. Avoid sudden stops, starts, or turns of the construction equipment. Fill all ruts from construction equipment with additional cover material. Do not re-grade ruts with placement equipment.

Place subsequent lifts of cover material in the same manner. Vibratory compactors may be used for compacting subsequent lifts. If foundation failures occur, repair the damaged areas and revert to the use of non-vibratory compaction equipment.

207.05 Permanent Erosion Control Applications. Place and anchor the geotextile on an approved smooth-graded surface. For slope or wave protection, place the long dimension of the geotextile down the slope. For stream bank protection, place the long dimension of the geotextile parallel to the centerline of the channel.

Overlap the geotextile a minimum of 300 mm (12 inches) at the ends and sides of adjoining sheets or sew the geotextile joints according to the manufacturer's recommendations. Overlap the uphill or upstream sheet over the downhill or downstream sheet. Offset end joints of adjacent sheets a minimum of 1.5 m (5 feet). Pins may be used to hold the geotextile sheets in place. Space pins along the overlaps at approximately 0.9 m (3-foot) centers.

Place aggregate, slope protection, or riprap on the geotextile starting at the toe of the slope and proceed upward. Place riprap onto the geotextile from a height of less than 300 mm (12 inches). Place slope protection rock or aggregate backfill onto the geotextile from a height less than 0.9 m (3 feet). In underwater applications, place the geotextile and cover material in the same day.

207.06 Soil Reinforcement Applications. Install the geogrid reinforcement according to the manufacturer's recommendations. Place the geogrid reinforcement at the elevations and to the

extent shown on the plans. Place the geogrid reinforcement in continuous longitudinal strips such that the principle strength (highest strength) axis is perpendicular to the slope or wall face. If unable to complete the required length with a single continuous length of geogrid, a joint may be made with the CO's approval. Only one joint per length of geogrid will be allowed. Construct this joint for the full width of the strip using a similar material, conforming to the requirements of Subsection 714.03(a), and following the manufacturer's recommendations. Pull and hold taut joints in geogrid reinforcement during fill placement. Lay flat and pull taut the geogrid reinforcement prior to backfilling. After a layer of geogrid reinforcement has been placed, use suitable means, such as pins or small piles of soil, to hold the geogrid reinforcement in position until the subsequent layer of backfill can be placed. Do not operate track-mounted equipment on the geogrid reinforcement until at least 150 mm (6 inches) of soil has been placed over the geogrid. Keep equipment turning to a minimum to prevent displacement of embankment and damage to the geogrid reinforcement. If approved by the CO, rubber tired equipment may pass over the geogrid reinforcement at speeds less than 16 kph (10 miles per hour). If during embankment placement waves, wrinkles, or slack develop in the geogrid, remove the embankment and pull geogrid taut to remove slack.

Place only that amount of geogrid reinforcement required for immediately pending work to prevent undue damage. During construction, the surface of the fill should be kept approximately horizontal. Place geogrid reinforcements within 75 mm (3 inches) of the design elevations and extend to the length as shown in the plans unless otherwise directed by the CO. Place primary and secondary geogrid reinforcement as shown on the plans or as directed by the CO. Place and compact embankment soils according to Subsections 204.10 and 204.11. Do not place sharp or angular rock and rock larger than 100 mm (4 inches) in diameter within 150 mm (6 inches) of the geogrid reinforcement. After the specified soil layer has been placed, install the next layer of geogrid reinforcement. Repeat the process for each subsequent layer until final grade is reached.

207.07 Subgrade Preparation. Do not begin the lining installation until after a proper base has been prepared to accept the Polypropylene membrane. All vegetation, roots and grass must be removed. Fill any cracks or voids. Provide base material that is smooth and free from sharp objects that could puncture the lining. Place a 0.15m (0.5 ft) thick layer of sand on subgrades with a slope less than 1:2.5. Place Geotextile Type IV-E on subgrades with a slope of 1:2.5 or greater according to Section 207.05. Make the surface uniformly sloping per the drawings. Avoid abrupt changes in elevation grade of the prepared surface.

207.08 Geomembrane Installation. Place the Polypropylene lining over the prepared surface, as outlined in the drawings in a manner which minimizes handling. The panels should not be unfolded under extreme cold or windy conditions. Install the liner in a relaxed condition, free of stress or tension. Stretching the liner to fit is not permissible.

Use lap joints to seal factory fabricated panels of Polypropylene together in the field. Position the panels so that there is a nominal 4-inch (10.1-centimeter) seam overlap. Wipe clean the contact surfaces of the two sheets to remove all dirt, dust, moisture or other foreign materials.

Field seams are made by thermal fusion bonding. Set the welding machine to the pre-determined temperature and speed. Make a trial seam and tested to verify these settings. Adjust the machine settings accordingly. Throughout the seaming operation, occasional adjustments of temperature or

speed as the result of changing ambient conditions may be necessary to maintain a consistent seam. A 1.5 inch (3.8 centimeter) nominal seam width is required for a single track welds. Dual track welds should have two 0.5 inch (1.3 centimeter) nominal seams separated by an air test channel.

207.09 Earth Fill Above Geomembrane. Do not drive construction equipment on top of geomembrane unless a minimum of 1 meter (3.3 feet) of fill material has been placed on the geomembrane.

207.10 Joints to Structures. Seal the polypropylene membrane to all concrete structures and other openings through the lining.

207.11 Repairs to Polypropylene Liner. Patch any cuts, rips or tears in the membrane with a piece of the same membrane material. Patches should be cut with rounded corners and should overlap the damaged area a minimum of 3 inches (7.62 centimeters).

Patches are applied with a hand held heat gun and roller. The patch and damaged membrane area should be clean and dry. Insert the heat gun between the patch and the membrane liner heating the surfaces of each to a molten state. A steel roller should be immediately applied smoothing out any wrinkles.

207.12 Acceptance. Material for earthwork geotextile will be evaluated under Subsections 106.02, 106.03, and 714.01. Material for the geogrid will be evaluated under Subsections 106.02, 106.03, and 714.03. Material for geomembrane will be evaluated under Subsections 106.02, 106.03, and 725.19.

Earthwork geotextile and geomembrane installation will be evaluated under Subsections 106.02 and 106.04.

Measurement

207.13 Measure the Section 207 items listed in the bid schedule according to Subsection 109.02 and the following as applicable.

Measure geogrid by area in place per lift. Do not measure longitudinal overlaps.

Payment

207.14 The accepted quantities will be paid at the contract price per unit of measurement for the Section 207 pay item listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

**Section 208. — STRUCTURE EXCAVATION AND BACKFILL FOR SELECTED
MAJOR STRUCTURES**

Measurement

208.13 Add the following:

Measure temporary shoring by the square meter of vertical face. Do not measure temporary shoring under 1.2 meters in total height unless approved by the CO prior to installation.

Section 253. - GABIONS AND REVET MATTRESSES

Description

253.01 Delete the text and substitute the following:

This work consists of constructing gabion structures and revet mattresses, including the placement of underdrain, geotextile, and granular fill associated with these systems.

Material

253.02 Add the following:

Geotextile Type I	714.01
Granular backfill	703.03
Plastic pipe	706.08

Construction Requirements

253.03 General. Delete the first sentence and substitute the following:

Survey according to Section 152 and verify the limits of the structure.

Add the following:

Place geotextile, granular backfill, and underdrain in accordance with Section 605.

253.05 Structure Erection. Add the following to the first paragraph:

For gabion structures, grade the foundation for a width equal to the width of the gabion plus 0.5 meter. Where gabions are set on rocky foundations, place 150 millimeters of select granular backfill under the baskets.

Measurement**253.10** Add the following:

Do not measure geotextile, granular backfill, and underdrain for payment.

Section 255. - MECHANICALLY STABILIZED EARTH WALLS

Delete the text of this Section and substitute the following:

Description

255.01 This work consists of designing, furnishing, and constructing mechanically stabilized earth (MSE) walls with steel (mesh or strip) or geogrid reinforcement according to the details shown on the plans.

Materials

255.02 Conform to the following Section and Subsections:

Concrete leveling pad	601
Foundation fill	704.01
Select wall backfill	704.13(a)
Wall backfill	704.13(b)
Wall facing fill	704.13(c)
Plastic pipe	706.08(d)
Geotextile	714.01
Geocomposite sheet drain	714.02(b)
Mechanically stabilized earth wall material	720.01

Construction Requirements

255.03 General. Survey MSE wall locations according to Section 152 to acquire existing terrain data. Prepare and submit preliminary installation drawings for MSE walls according to Subsection 104.03. Drawings will include existing terrain cross-sections and elevations of MSE walls. Do not prepare design drawings for MSE walls or disturb the existing ground at wall locations until existing terrain data has been acquired, incorporated into the preliminary drawings, and the CO has approved the drawings. Once the CO has approved preliminary drawings, submit design drawings according to Subsection 255.03(a).

Perform the work under Section 209 between May 1st and October 31st. Grade the foundation to a width equal to the length of reinforcing mesh or strips plus 500 millimeters. Bedrock and boulder excavation to obtain the necessary base width may be required. Excavate using equipment capable of removing the material while preventing material escape outside the construction limits. Excavate any loose, soft, or otherwise unsuitable material present at

foundation grade and replace with foundation fill in horizontal layers that when compacted do not exceed 150 millimeters in depth. Compact the MSE wall foundation according to Subsection 204.11.

For concrete-faced walls, provide a precast reinforced or non-reinforced cast-in-place concrete leveling pad according to Section 601. Cure cast-in-place leveling pads a minimum of 12 hours before placing wall facing.

(a) Design of MSE Walls. Using the approved preliminary drawings, design all MSE wall components for a 75-year design service life according to the requirements of AASHTO Standard Specifications for Highway Bridges current at time of contract award and FHWA publication No. FHWA-NHI-00-043, "Mechanically Stabilized Earth Walls and Reinforced Soil Slopes Design and Construction Guidelines" (2001). Other design methods will not be allowed. Design the MSE walls for:

- (1) External stability including: sliding, overturning, bearing capacity, and eccentricity.
- (2) Internal stability including: tensile stresses, pullout, facing connection, and sliding along reinforcement.
- (3) Local stability including: bulging and maximum unreinforced height.
- (4) Design the MSE wall to account for dead and live loads, seismic loads, horizontal loads from guardrails or barriers, hydrostatic loads, and other loads as appropriate.
- (5) Design the MSE wall such that the toe is at a depth that no scouring or undermining will occur.

Use Table 255-1 for required factors of safety per AASHTO for MSE wall stability design:

Table 255-1
Required Factors of Safety

External Stability	Static	Seismic ($A > 0.09g$)
Base Sliding	1.5	1.1
Overturning	2.0	1.5
Bearing Capacity	2.5	1.5
Eccentricity	$e < L/6$	$E < L/3$
Internal Stability	Static	Seismic ($A > 0.09g$)
Tensile Stress:		
Steel Mesh (wire-faced walls)	$0.55F_y$	$0.73F_y$
Steel Mesh (concrete-faced walls)	$0.48F_y$	$0.64F_y$
Steel Strips	$0.55F_y$	$0.73F_y$
Geogrids	1.5	1.1
Pullout	1.5	1.1
Facing Connection (for concrete-faced walls)	1.5	1.1
Internal Sliding	1.5	1.1
A: Acceleration coefficient, e: Eccentricity, L: Reinforcement length, F_y : Yield strength of steel		

Table 255-2 lists available geotechnical report(s). General soil, rock strata descriptions, and indicated boundaries are based on engineering judgment and interpretation of available subsurface information, and may not reflect actual variation in subsurface conditions between borings and samples. The information has been prepared and is intended for Government design purposes. It is listed here for the purpose of providing intended users with access to the same information available to the Government.

Table 255-2
Available Geotechnical Reports

Title	Author	Date
Final Project Geotechnical Report	CH2MHILL	April 2005
Final Geotechnical Investigation and Design Supplemental Report	Yeh and Associates, Inc.	November 10, 2006
Final Geotechnical Advisory (Retaining Walls)	Yeh and Associates, Inc.	January 2008

Use soil parameters shown in Table 255-3 for the internal, external, and local stability of the MSE retaining walls:

Table 255-3
Soil Design Parameters

Material	Friction Angle (degrees)	Cohesion (kPa)	Unit Weight (kN/m³)
Select Backfill	34	0	19.6
Wall Backfill	30	0	18.8
Foundation Soil	30	0	18.8

Use permanent retaining wall systems that have previously been successfully designed and constructed for a public highway agency in the United States, and that have performed in an acceptable manner. The following wire-faced retaining wall systems have been previously constructed on CFLHD projects. For all wire-faced wall systems, submit the required information listed in Subsection 255.03(b). For wire-faced systems not listed below and all concrete-faced wall systems, submit the required information listed in Subsections 255.03(b) and 255.03(c).

Hilfiker Retaining Wall

3900 Broadway
P.O. Box 2012, #E
Eureka, CA 95503
(800) 762-8962

SSL Retaining Walls

4740 Scotts Valley Dr.
Scotts Valley, CA 95066
(831) 430-9300

The Reinforced Earth Company
8614 Westwood Center Drive
Suite 1100
Vienna, VA 22182-2233
(703) 821-1175

Tensar Earth Technologies, Inc.
5883 Glenridge Dr., Suite 200
Atlanta, GA 30328
(800) 292-4459

T & B Structural Systems, Inc.
637 West Hurst Blvd.
Hurst, TX 76053
817-280-9858

(b) Design Submittal. Submit four (4) sets of drawings and supporting calculations according to Subsection 104.03. One set will be returned with any comments and requests for revisions or additional information. Allow 28 calendar days after received by the CO for review and acceptance of the submittal. If revisions are required, make corrections and resubmit four (4) revised sets. If the drawings and calculations must be resubmitted, the time for review and acceptance starts over. Upon acceptance, furnish five (5) complete sets of the submittal to the CO. Do not order materials for MSE retaining walls before the CO approves the submittal.

To avoid having submittals returned with a request for more information, submittals should be organized in such a way to facilitate review for conformance with design standards and evaluation of design cases and loads. Include the following minimum information with the MSE wall submittals:

(1) Design calculations and information:

- (a) Design calculations including an index page to the calculations. Submit design calculations on sheets approximately 220 millimeter by 280 millimeter in size with the project number, wall location, date of preparation, initials of designer and checker, and page number at the top of the page.
- (b) Highway Innovative Technology Evaluation Center evaluation report (not required for wire-faced wall systems). Contact the following for copies of HITEC evaluation reports.

Highway Innovative Technology
Evaluation Center (HITEC)
1015 15th Street NW, Suite 600
Washington, DC 20005-2605
Phone: 202-842-0555
Fax: 202-789-5345
E-mail: hitec@cerf.org

- (c) Design notes including an explanation of any symbols and computer programs used in the wall design.
- (d) Summary of soil parameters, loading conditions considered, and factors of safety, including all partial reduction factors, if any.
- (e) Summary of wall reinforcing elements used and their design properties.
- (f) Demonstrate the compatibility of the effective aperture (the average opening created between the facing mat and backing mat) with the specified MSE wall facing fill.
- (g) Provide a design analysis for each possible design situation.
- (h) Specify the applied bearing pressure at wall foundation.
- (i) Include one set of hand calculations for each unique design analysis if computer analysis other than MSEW per FHWA publication No. FHWA-NHI-00-043 is used.
- (j) Special details, cross-sections, and quantities.
- (k) A well-documented field construction manual describing in detail and with illustrations where necessary, the step-by-step construction process.

(2) Drawings:

- (a) Submit design drawings on sheets approximately 280 millimeter by 430 millimeter in size with the project number, wall location, date of preparation, initials of designer, checker, and page number.
- (b) A plan view of the wall identifying:
 - (1) Offset from the construction centerline to the face of the wall at its top and base at all changes in horizontal alignment.
 - (2) Limit of widest reinforcement.
 - (3) Centerline of any drainage structure or drainage pipes behind, passing through, or passing under the wall.
 - (4) Horizontal and vertical curve data affecting the wall. Match lines or other details to relate wall stationing to centerline stationing.
- (c) An elevation view of the wall identifying:
 - (1) Elevation at the top of the wall, at all horizontal and vertical breaks, and at least every 5.0 meters along the wall.
 - (2) Elevations at the wall base or top of leveling pads.
 - (3) Distance along the face of the wall to all steps in the wall base or leveling pads.
 - (4) Length and type of reinforcement elements.
 - (5) Distance along the face of the wall to changes in the length of the reinforcement.
 - (6) Existing and final ground line along wall layout line.
 - (7) Existing ground line at a horizontal distance equal to the bench width away from the bottom of the wall. Refer to the MSE wall detail sheet.
 - (8) Listing of the summary of quantities.
- (d) General notes for construction of wall.
- (e) Wall Details:
 - (1) Typical section of wall.
 - (2) Wall batter.
 - (3) Details for constructing walls around drainage facilities entering, exiting, and within MSE wall envelope.

- (4) Details for guardrail posts punching through the upper reinforcement layers.
- (5) Details for terminating walls and adjacent slope construction.

(c) Supplemental Design Submittal. Submit the following additional information for wire-faced systems not listed at the end of Subsection 255.03(a) and all concrete-faced wall systems.

- (1) Examples of successful projects (design, construction, and in-service performance with a public agency).
- (2) Name, address, and telephone number of agency contact.
- (3) Narrative descriptions and photos of example projects.
- (4) Limitations and constraints of the system.
- (5) Details of wall elements (procedures for field and laboratory evaluation including instrumentation and special requirements, if any).
- (6) Material samples of reinforcing elements and connection devices.
- (7) Construction control specifications showing material type, certifications, field-testing, acceptance/rejection criteria, and placement procedures.
- (8) Typical unit costs, supported by data from actual projects.
- (9) Laboratory and field-test results which support the system design criteria.
- (10) Information substantiating all partial factors of safety used in establishing the reinforcement elements long-term design strength.
- (11) Additional information requested by the CO.

(d) Temporary shoring. When required, design temporary shoring using one of the methods described in the AASHTO Standard Specifications for Highway Bridges current at time of contract award. Refer to Section 562 for temporary shoring construction requirements.

255.04 Wall Erection. Erect the wall according to the specifications, the design drawings approved by the CO, and manufacturer's recommendations. When requested, have an experienced field representative from the wall system manufacturer available during the first three days of wall erection and as otherwise requested by the CO.

Place reinforcement elements horizontally on compacted fill at elevations and dimensions shown on the approved design drawings. Orient reinforcement elements with the highest strength axis perpendicular to the wall alignment. Spliced reinforcement connections between shorter pieces of reinforcement will not be allowed unless approved by the CO. Prior to placing fill over reinforcement, place the next course of wall units, pull the reinforcement taut, and anchor the reinforcement.

Wall erection work may be performed between November 1st and April 30th if the excavation has been completed and stabilized according to Section 209.

(a) Wire-faced walls. Connect, tighten, and anchor soil reinforcement elements to the wall facing units before placing backfill. Design and construct the wire-faced wall and components to have the ability to compress up to 50 millimeters at each layer of reinforcement without creating outward bulging of the facing elements. Design and construct the wall and components to meet Table 255-5:

Table 255-5
Wire Faced Wall Construction Tolerances

Description	Requirement
Wall batter	Within 50 millimeters per 3.0 meters of wall height and 1% for the overall wall height
Wall height	Within 25 millimeters per 3.0 meters of wall height and a maximum of 100 millimeters
Horizontal and vertical alignment	Within 50 millimeters at any point in the wall when measured with a 3.0meter straightedge
Separation of facing mat	Outside of facing mat within 40 millimeters from wall facing fill at all locations
Reinforcement elevation	Within 50 millimeters of the design elevation and within 50 millimeters above the corresponding connection elevation at the wall face. Do not place reinforcement below corresponding connection elevation.
Reinforcement inclination	Within 2% from horizontal

Include hardware cloth behind the wire face unless the D_{15} of the wall facing fill gradation is larger than the effective wire face opening. Place a Type I-B geotextile between the wall facing fill and select wall backfill. Terminate wire-face wall at the beginning and end of each lift with a return of the wall facing a minimum of 1.2 meters into the backfill. Install hardware cloth inside the bottom basket to prevent piping.

255.05 Backfilling. Backfill the reinforced volume with select wall backfill in compacted lifts not to exceed 150 millimeters where hand compaction is used or in compacted lifts not to exceed 230 millimeters where heavy compaction equipment is used. Place, spread and compact select wall backfill over the reinforcement in a manner that prevents slack in the reinforcement. Compact select wall backfill according to Subsection 204.11. Ensure that no voids exist below the reinforcing elements. Where the stabilized volume supports spread footings for bridges or other structural loads, compact the top 1.5 meters to at least 100 percent of the maximum density according to AASHTO T-99 method C.

Use wall facing fill within 600 millimeters of the wall face. Place wall facing fill in compacted lifts not exceeding 300 millimeters and densify using hand operated equipment. Place wall facing fill in sequence with select wall backfill such that the top of the adjacent materials are within 450 millimeters of one another. Do not damage or disturb the facing or reinforcing elements. Do not operate equipment directly on top of the reinforcing elements. Remove and replace all damaged, misaligned, or distorted wall components.

Backfill and compact behind the reinforced volume with wall backfill according to Subsections 204.10 and 204.11. At the end of the day's operation, slope the last lift of fill away from the wall face to direct surface runoff away from the wall face. Do not allow surface runoff from adjacent areas to enter the wall construction area.

255.06 Drainage. Subsurface drainage is required. Install the drainage system as shown in drawing "Special M255-51A". The CO may require supplemental drainage when seepage is identified in the excavation.

255.07 Acceptance. Structure excavation will be evaluated under Section 209.

Select wall backfill, wall backfill, and wall facing fill will be evaluated under Subsection 704.13. Foundation fill will be evaluated under Subsection 704.01.

Material for mechanically stabilized earth walls, plastic pipe, geotextiles, and geocomposite sheet drains listed under Subsections 706.08, 714.01, 714.02 and 720.01 will be evaluated under Subsections 106.02 and 106.03.

Construction of mechanically stabilized earth wall will be evaluated under Subsections 106.02 and 106.04.

Survey work will be evaluated under Section 152.

Concrete leveling pad will be evaluated under Section 601.

Measurement

255.08 Measure mechanically stabilized earth walls by the square meter of front wall face. Structure excavation, select wall backfill, wall backfill, wall facing fill, drainage system, and returns at the ends of each lift will not be measured for payment and are considered incidental to the MSE walls.

Measure foundation fill and temporary shoring items as indicated in Section 208.

Payment

255.09 The accepted quantities, measured as provided above, will be paid at the contract price per unit of measurement for the pay item listed below that is shown in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

Payment at the unit bid price for the Section 255 pay items included in the bid schedule is full compensation for wall construction to a depth not exceeding 1.5 meters below the lowest elevation shown on the plans for each MSE wall structure. MSE wall construction includes structure excavation, structural backfill, wall elements, and all other costs associated with the wall installation. When the depth of the footing below the lowest elevation shown on the plans for each MSE wall exceeds 1.5 meters, either the Contractor or the CO may request an equitable price adjustment for the depth in excess of 1.5 meters. There will be no equitable adjustment when the depth of the footing does not exceed 1.5 meters below the elevation shown in the plans; however, all work constructed will be measured for payment.

Table 255-7
Sampling and Testing Requirements

Material or Product	Type of Acceptance (Subsection)	Property or Characteristic	Test Methods or Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time
Backfill	Measure and tested for conformance (106.04)	Classification	AASHTO M145	1 per soil type	Source of material	Yes	Before using in work
		Gradation	AASHTO T27 & T11	1 per soil type	Source of material	Yes	Before using in work
		Moisture density	AASHTO T 180 Method D ⁽¹⁾ , or AASHTO T99, Method C ⁽¹⁾	1 per soil type	Source of material	Yes	Before using in work
		Compaction	AASHTO T 310 or other approved procedures	2 per lift	In place	---	Before using in work

⁽¹⁾ A minimum of five points per proctor.

Section 301. - UNTREATED AGGREGATE COURSES**Construction Requirements****301.03 General.** Delete the third paragraph and substitute the following:

For base course set target values within the gradation ranges shown in Table 703-2, grading C, D, or E.

For surface course aggregate set target values within the gradation range shown in Table 703-3.

Aggregates for the production of this material may be obtained from excavated material within the designed slopes between station 21+160 to 21+300. Refer to Section 105.05.

301.05 Compacting. Add the following:

After initial spreading, or grading to grade stake elevations where applicable, and compacting, finish the final aggregate course using a planing or leveling device specifically designed for land planing/leveling purposes. Furnish a device or devices of the self-supporting towed type with a minimum length of 8 meters from the towing tractor drawbar to the rear axle and a minimum cutting blade width of 3 meters. The intent is for the device to be capable of cutting material from high areas and transporting the excess material to low areas. All wheels used for supporting the machine during planing must travel on the surface being planed. When planing, make passes beginning at the roadway shoulders and proceeding with overlaps to centerline. Do not use the leveler/planer to construct the required crown or super-elevation cross section. Use the leveler/planer to refine the work performed by motor graders.

Standard earthwork motor graders and landscaping grader boxes are NOT acceptable leveling/planing devices under this specification.

When leveling is complete, water and compact the aggregate surface to not less than 95% of maximum density. Apply the prime coat as soon as practicable after leveling and compaction is complete.

Payment**301.10** Add the following:

A price adjustment will be made for fluctuations in the cost of motor fuel (diesel only) consumed in the performance of applicable construction work according to Subsection 109.06 Pricing of Adjustments, Fuel Price Adjustment Provision.

Section 403. - HOT ASPHALT CONCRETE PAVEMENT

Delete the Section and substitute the following:

Description

403.01 This work consists of constructing one or more courses of hot asphalt concrete pavement. Asphalt binder is designated according to AASHTO M 320, Table 1.

A minimum of one percent lime is required in the hot asphalt concrete mixture. Lime will conform to Type 3 as designated in subsection 702.08.

Pavement Roughness is Type III

Asphalt binder grade is PG 64-16

Material

403.02 Conform to the following Subsections:

Lime

702.08

Construction Requirements**403.03 Composition of Mix (Job-Mix Formula).**

Furnish hot asphalt concrete mix composed of crushed stone or gravel and asphalt binder mixed in an approved plant. Use an aggregate quality, gradation and an asphalt binder grade conforming to those used locally in the construction of highways by the State Department of Transportation.

Submit a currently approved State Department of Transportation job-mix formula for approval at least 28 days before production. Include the location of all commercial mixing plants to be used and a separate job-mix formula for each plant.

For each proposed job-mix formula, submit a production certification meeting state agency specifications and conforms to design parameters (a) or (b) from Table 403-1 for the type of mix submitted. The job-mix formula must meet design parameter (c) in Table 403-1. Submit a sample of loose mix to the CO 21 days prior to placement. Include a signed statement prepared by the testing laboratory that certifies the proposed job-mix formula meets the requirements of the contract and can be compacted in the field during production to meet the contract requirements. For each job-mix formula include copies of laboratory test results with the following information:

- Stockpile blend ratios

- Individual stockpile and combined aggregate gradations
- Target value for percent passing each sieve size for the aggregate blend
- Aggregate properties
- Target asphalt binder content
- Maximum density value according to AASHTO T 209
- Test values for (a), (b), and (c) from the Table 403-1
- Submit loose mix sample three weeks prior to paving
- History demonstrating the job-mix formula has been used in the area

Table 403-1
Hot Asphalt Concrete Mix Requirements

Design Parameters	Specification
(a) Superpave (AASHTO M 323, R 35, and T 312) (1) Gyratory compactive effort (2) Volumetric properties at 0.3 to 3 million ESAL's (AASHTO M 323)	7, 75, 115 see Table 401-1
(b) Hveem (AASHTO T 246 and AASHTO T 247) (1) Stabilometer, minimum (2) Percent Air Voids ⁽¹⁾	35 3 – 5
(c) Moisture Susceptibility (1) Retained strength, % minimum (AASHTO T 165 and T 167) or (2) Retained strength, % minimum (AASHTO T 283)	70 80

⁽¹⁾ The percent of air voids are based on AASHTO T 166, AASHTO T 209 and AASHTO T 269.

Up to 25 percent recycled asphalt pavement material by mass may be used in the mix.

Adjust the aggregate moisture to at least 4 percent by mass of aggregate. Mix the lime uniformly with the aggregate before introducing the aggregate into the dryer or dryer drum. Use calibrated weighing or metering devices to measure the amount of lime and moisture added to the aggregate.

For batch plants, heat, dry, and deliver aggregate for pugmill mixing at a temperature sufficient to produce a mix temperature within the approved range. Adjust flames used for drying and heating to prevent damage to and contamination of the aggregate.

Control plant operations so the moisture content of the mix behind the paver is 0.5 percent or less according to AASHTO T 110 or T 255.

Add lime to the aggregate by Method A, B, or C below.

Method A - Add lime to the combined cold feed aggregate using an enclosed in-line cold feed mechanical pugmill mixer. Use a twin-shaft, continuous mixing pugmill with adjustable mixing paddles. Adjust the retention time of the mixture in the pugmill so no unmixed lime is visible after the lime and aggregate exit the pugmill.

Method B - Add lime to the produced aggregates during stockpiling using a pugmill. Add twenty-five (25) percent of the lime to be added to the coarse aggregate stockpile, and add

seventy-five (75) percent of the lime to be added to the fine aggregate stockpile. When more than two stockpiles are used, include the distribution of lime per stockpile in the mix design.

A minimum moisture content of two (2) percent by dry weight for coarse aggregate and four (4) percent by dry weight for fine aggregate is required at the time the aggregates and lime are mixed.

Method C - Use a lime slurry consisting of one part lime and three parts water. Equip the plant with a mixing unit to allow mixing of the slurry and aggregate prior to entering the dryer or dryer drum.

Adjust the moisture of the coarse and fine aggregates, or combination of aggregates, to obtain uniform coating of the aggregate with the lime.

Prior to the production of hot asphalt concrete pavement, obtain approval of synchronized metering and weighing devices used to introduce a constant rate of lime and water.

403.04 Surface Preparation. Prepare the surface according to Subsection 401.06.

403.05 Weather Limitations. Place hot asphalt concrete according to Subsection 401.07.

403.06 Hauling. Haul the asphalt mix using vehicles conforming to Subsection 401.11.

403.07 Placing and Finishing. Do not use mixes produced from different plants unless the mixes are produced according to the same job-mix formula, use material from the same sources, and are approved.

Place Hot asphalt concrete mix at a temperature conforming to Table 401-2. Measure temperature of the mix in the hauling vehicle just before dumping into spreader or measure it in the windrow immediately before pickup.

Place the mix with a paver conforming to Subsection 401.05. Control horizontal alignment using a reference line. Automatically control the grade and slope from reference lines, a ski and slope control device, or dual skis. Use skis having a minimum length of 6 meters.

In areas where mechanical spreading and finishing is impractical, place and finish the mix with alternate equipment to produce a uniform surface closely matching the surface obtained when using a mechanical paver.

Offset the longitudinal joint of one layer at least 6 inches from the joint in the layer immediately below. Make the longitudinal joint in the top layer along the centerline of two-lane roadways or at the lane lines of roadways with more than two lanes. For simple curve widening locations (widening only on one side) shift the centerline joint location such that the final layer is midway between the normal edge of shoulders. The shift from the staked centerline will be towards the

widened lane one-half the total curve widening specified for the given station as shown in the plans.

The CO will designate the job-mix formula to be used for wedge and leveling courses at each location. Place wedge and leveling courses in maximum 75 millimeter lifts. Complete the wedge and leveling before starting normal paving operations.

Use a Materials Transfer Vehicle (MTV) with storage and remixing capabilities on all mainline construction when placing asphalt concrete mixtures. The MTV will independently remix and deliver mixture from the hauling equipment to the paving equipment.

Furnish an MTV with the following capabilities:

- An unloading system to receive mixtures from the hauling equipment.
- A minimum storage capacity of 13 tons with a remixing system in the MTV storage bin.
- A discharge conveyor to deliver the mixture to the paver hopper.
- The MTV system cannot exceed maximum legal loadings on structures.

Acceptable Material Transfer Vehicles are:

- Barber Greene MTV-3500
- Roadtec SB-1500
- Roadtec SB-2500

In the event the MTV malfunctions during paving operations, the Contractor must suspend paving, however hot mix in transit and stored in the silo at the time of breakdown may be placed without the use of an MTV. Do not resume hot mix placement until the MTV is operational.

403.08 Compacting. Thoroughly and uniformly compact the asphalt surface by rolling. Do not cause cracking, shoving, or undue displacement. Continue rolling until all roller marks are eliminated, all cracks are sealed, and the required density is obtained. Do not roll the mix after the surface cools below 80 °C.

Monitor the compaction process with nuclear density gauges calibrated to the control strip core density test results. Compact to a pavement specific gravity (density) that is no less than 92.0 percent of the maximum specific gravity (density) determined according to AASHTO T 209.

Cut 100 or 150-millimeter diameter core samples from the compacted pavement. Fill and compact the core holes with asphalt concrete mixture. Label the cores and protect them from damage due to handling or temperature during storage. Perform specific gravity and thickness tests on the cores and deliver them to CO.

Along forms, curbs, headers, walls, and other places not accessible to the rollers, compact the mix with alternate equipment to obtain the required compaction.

403.09 Pavement Roughness. Measure the roughness of the final paved surface course within 21 days after final rolling of the completed roadway paving, and before placement of any surface

treatment. In addition to meeting the pavement roughness type requirements, construct all pavement surfaces to meet the requirements of Type V pavement roughness.

(a) International roughness index (IRI).

Equipment. Provide an ASTM E 950, class 1, high speed inertial profiling system meeting all the requirements and specifications found in AASHTO MP 11, with emphasis on the filter and sampling intervals specified in sections 4.2.3 and 4.2.4. Certify profiler in accordance with AASHTO PP 49. Operate profiler in accordance with AASHTO PP 50. At the pre-construction meeting and before profiling provide copies of profiling system to be used and certification(s). Display a current decal on the equipment indicating the expiration date of certification(s).

Personnel. Certify operator in accordance with AASHTO PP 49. At the pre-construction meeting and before profiling provide copies of operator certification(s). Furnish personnel to provide flagging operations as required.

Measuring. Measure the pavement profile in both wheel paths, two longitudinal traces with a sensor path spacing of 165-180 centimeters, centered in the traveled way of the lane. For each lane, submit on disk one continuous raw IRI data file (*.ERD) for the “left” and “right” wheel paths to the CO immediately after profiling. Use profiler’s automatic start/stop activation when collecting data. The CO must coordinate and observe profiling operations. Non-continuous data files will not be accepted. Submit inertial profiler setup parameters (e.g. filters, sampling interval, and segment length, etc.). Measure excluded areas according to Type V pavement roughness.

Evaluation. The CO will review, analyze and may perform verification testing on all IRI measurements. The CO will analyze profile data using Profile Viewer and Analysis (ProVAL) software. The CO’s analysis will be used to determine the Mean Roughness Index (MRI), and the associated roughness pay factor.

Defective areas include the following:

- Bumps or Localized Roughness Areas (LRA) in excess of 5.0 millimeters in 7.62 meters, using ProVAL’s Localized Roughness Analysis.
- 0.1-lane kilometer MRI greater than a Ride Quality Threshold of 1.657 meters/kilometer, using ProVAL’s Smoothness Assurance Analysis.

Correct defective areas according to paragraph (c) below.

If the final MRI for the entire traveled way is greater than 1.973 meters/kilometer using ProVAL’s Ride Statistics Analysis, the traveled way is in reject. Correct rejected traveled way according to paragraph (c) below.

An MRI value will be determined for each 0.1-lane kilometer of traveled way. The total traveled way will be analyzed including partial segments less than 0.1-lane kilometer. Exclusion areas are 7.62 meters on either side of Beginning and End of Project, cattle guards, and bridges. These areas will be excluded from the calculation of MRI and determination of localized roughness.

(1) Type III pavement roughness (IRI measurements for reconstructed and new roads). Measure the roughness of the final paved surface course. Pay factors from Table 401-3 will be used in conjunction with the histogram printout from ProVAL's Smoothness Assurance Analysis. The final pay factor (PF_{rough}) is equal to the sum of the products of the individual pay factors indicated in Table 401-3 multiplied by ProVAL's corresponding histogram percentages, divided by 100. Calculate the final pay factor to two decimal places.

Table 401-3
Type III Pavement Roughness

MRI (m/km)	Pay Factor (PF_{rough})
Greater than 1.499	0.70
1.499 to 1.420	0.80
1.420 to 1.263	0.90
1.263 to 1.105	0.96
1.105 to 0.947	1.00
0.947 to 0.789	1.02
0.789 to 0.631	1.03
0.631 to 0.473	1.04
Less than 0.473	1.05

(2) Type IV pavement roughness (IRI measurements for overlay, recycle with overlay, or milling with overlay projects). Measure the roughness of the existing surface before construction traffic. The existing surface is defined as the original surface before overlaying, recycling, or milling. Submit original surface raw data files (*.ERD). The CO will review, analyze and may perform verification testing on all IRI measurements. No work that will disturb the original surface will proceed until CO's analysis is complete. The original surface MRI will be used to determine the percent improvement for the entire traveled way.

The percent improvement in MRI will be determined to one decimal place for the entire traveled way according to the following formula:

$$\% \text{ Improvement} = [(\text{Original MRI} - \text{Final MRI}) / \text{Original MRI}] \times 100$$

Table 401-4 will be used to determine the final pay factor (PF_{rough}) for the entire traveled way. No deductions will be made when the final MRI value is less than or

equal to 1.105 meters per kilometer ($PF_{\text{rough}} = 1.00$). Compute the final pay factor to two decimal places.

Table 401-4
Type IV Pavement Roughness

Single Lift Percent Improvement (%)	Pay Factor (PF_{rough})	Multi-Lift Percent Improvement (%)	Pay Factor (PF_{rough})
Greater than 50.0	PF = 1.05	Greater than 60.0	PF = 1.05
47.6 to 50.0	PF = 1.04	58.6 to 60.0	PF = 1.04
45.1 to 47.5	PF = 1.03	57.6 to 58.5	PF = 1.03
43.6 to 45.0	PF = 1.02	56.6 to 57.5	PF = 1.02
42.1 to 43.5	PF = 1.01	55.1 to 56.5	PF = 1.01
25.0 to 42.0	PF = 1.00	49.0 to 55.0	PF = 1.00
24.0 to 24.9	PF = 0.99	48.0 to 48.9	PF = 0.99
23.0 to 23.9	PF = 0.98	47.0 to 47.9	PF = 0.98
22.0 to 22.9	PF = 0.97	46.0 to 46.9	PF = 0.97
21.0 to 21.9	PF = 0.96	45.0 to 45.9	PF = 0.96
20.0 to 20.9	PF = 0.95	44.0 to 44.9	PF = 0.95
19.0 to 19.9	PF = 0.94	43.0 to 43.9	PF = 0.94
18.0 to 18.9	PF = 0.93	42.0 to 42.9	PF = 0.93
17.0 to 17.9	PF = 0.92	41.0 to 41.9	PF = 0.92
16.0 to 16.9	PF = 0.91	40.0 to 40.9	PF = 0.91
15.0 to 15.9	PF = 0.90	38.0 to 39.9	PF = 0.90
14.0 to 14.9	PF = 0.89	36.0 to 37.9	PF = 0.89
13.0 to 13.9	PF = 0.88	35.0 to 35.9	PF = 0.88
12.0 to 12.9	PF = 0.87	34.0 to 34.9	PF = 0.87
11.0 to 11.9	PF = 0.86	33.0 to 33.9	PF = 0.86
10.0 to 10.9	PF = 0.85	31.0 to 32.9	PF = 0.85
5.0 to 9.9	PF = 0.80	25.0 to 30.9	PF = 0.80
Less than 4.9	PF = 0.70	Less than 24.9	PF = 0.70

NOTE: A single lift is defined as asphalt concrete pavement placed in one operation.

(b) Type V pavement roughness (straightedge measurement). Use a 3 meter metal straight edge to measure at right angles and parallel to the centerline. Type V localized roughness areas (LRA) are surface deviations in excess of 6 millimeters in 3 meters between any two contacts of the straightedge with the surface.

(c) Defective area correction. Correct defective areas from paragraphs (a) or (b) above. Obtain approval from the CO for correction of defected areas as well as the method of correction. When grinding is allowed, the area ground shall not exceed 67 square meters per location, and is limited to 6 locations per lane kilometer. Grinding depth is limited to 12.5% of the design pavement thickness. Grinding in excess of these limits is not an acceptable

method of correction unless it is accompanied by an overlay or a single-course surface treatment over the entire length of the project.

If grinding is allowed, grind the pavement surface with a diamond blade machine and apply a surface treatment according to Sections 409 or 410 as approved by the CO. The endpoints of the areas where a grinder is to be applied must be optimized using ProVAL.

If corrections are allowed, re-measure the pavement profile. Data from the re-measurement and re-analysis will be used to determine PF_{rough} in accordance with Table 401-3 or Table 401-4.

If corrections are not allowed, no adjustment will be made to the final pay factor (PF_{rough}) determined from Table 401-3 or Table 401-4. A dollar adjustment per remaining bump when grinding is not allowed will be determined according to subsection 401.19.

Defective area corrections and surface treatments shall be provided at no cost to the Government.

403.10 Acceptance. See Table 403-4 for sampling and testing requirements.

Hot asphalt concrete pavement will be evaluated under Subsections 106.02 and 106.03.

Hot asphalt concrete construction work will be evaluated under Subsections 106.02 and 106.04.

During placement of the mix the contractor will sample the loose mix according to Table 403-4. A split sample will be submitted to the CO for verification. Materials that do not meet the approved job-mix formula are considered unacceptable.

Hot asphalt concrete pavement will be evaluated under Subsections 106.02 and 106.03.

Hot asphalt concrete construction work will be evaluated under Subsections 106.02 and 106.04.

During placement of the mix the contractor will sample the loose mix according to Table 403-4. A split sample will be submitted to the CO for verification. Materials that do not meet the approved job-mix formula are considered unacceptable.

Measurement

403.11 Measure the Section 403 items listed in the bid schedule according to Subsection 109.02.

Payment

403.12 The accepted quantities will be paid at the contract price per unit of measurement for the Section 403 pay items listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

When the contract documents contain a pay item for hot asphalt concrete pavement, type III and type IV pavement roughness, a separate pay adjustment will be made. The dollar amount of the adjustment will be determined as follows:

$$\text{Type III and Type IV Pay Adjustment} = 24,800 (PF_{\text{rough}} - 1.00)(L) - (NLRA \times 300)$$

where:

PF_{rough} = Pay factor from Table 401-3 or Table 401-4.

L = Total project plan length in lane kilometers of traveled way including excluded areas.
Measure the project length to 2 decimals.

$NLRA$ = Total number of localized roughness areas (bumps) remaining in final traveled way as determined by ProVAL and Type V measurements.

TABLE 403-4
Sampling, Testing and Acceptance Requirements

Material or Property	Type of Acceptance (Subsection)	Characteristic	Test Methods or Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time
Hot Asphalt Concrete Pavement (design)	Measured and Tested for Conformance (106.03 & 106.04)	Job-mix formula verification	Subsection 403.02 ⁽¹⁾	1 per job-mix formula	Flowing mix stream (bin or belt discharge) or behind the laydown machine before rolling.	---	21 days before approval of job-mix formula
Hot Asphalt Concrete Pavement (production)	Measured and Tested for Conformance (106.04)	Job-mix formula verification	Subsection 403.02 ⁽¹⁾	1 per 700 t	Behind the laydown machine before rolling	Yes	24 hours
		Compaction ⁽²⁾	AASHTO T 166 and AASHTO T 209	1 per 700 t	In-place after compaction.	“	“
		Type III Pavement Roughness	AASHTO PP 49 & PP 50	See Subsection 401.16	Left and Right Wheel Paths	21 days after final paving	Hot asphalt concrete pavement

⁽¹⁾ Use only sieves indicated on the job-mix formula for the specified gradation.

⁽²⁾ Cut core samples from the compacted pavement and carefully remove using a core retriever. Fill and compact the sample holes with asphalt concrete mixture.

Section 404. - MINOR HOT ASPHALT CONCRETE**Table 404-1 Sampling and Testing Requirements.**

Add footnote (1) after Compaction in the “Property or Characteristic” column:

⁽¹⁾ When directed, verify density by taking core samples from the compacted pavement according to AASHTO T230 Method B. Fill and compact the sample holes with asphalt concrete mixture.

Section 409. - ASPHALT SURFACE TREATMENT**Construction Requirements**

409.10 Fog Seal. Add the following after the first sentence:

Unless otherwise noted on the plans, dilute the specified emulsion one part water to one part emulsified asphalt.

Measurement

409.14 Add the following:

Measure fog seal including water added for dilution.

Indicate a breakdown of total emulsion and water added on the load invoices supplied to the CO for payment.

Section 411. - ASPHALT PRIME COAT**Description**

411.01 Delete the second paragraph and substitute the following:

Prime coat asphalt grade is designated as shown in AASHTO M 140 or AASHTO M 208 for emulsified asphalt; AASHTO M 81 or AASHTO M 82 for cut-back asphalt; or Subsection 702.03(e) for other emulsified asphalts

Measurement

411.08 Add the following after the second paragraph:

Indicate a breakdown of total emulsion and water added on the load invoices supplied to the CO for payment.

Section 412. - ASPHALT TACK COAT**Description**

412.01 Delete the text of this Subsection and substitute the following:

This work consists of applying an emulsified asphalt or hot asphalt cement tack coat.

Tack coat emulsified asphalt grade will meet AASHTO T 140 or AASHTO T 208.

Tack coat asphalt cement grade will meet AASHTO M 20, M 226, or M 320

Measurement

412.08 Add the following after the second paragraph:

Indicate a breakdown of total emulsion and water added on the load invoices supplied to the CO for payment.

Section 417. – MINOR COLD ASPHALT MIX**Description**

417.01 Delete the text of this Subsection and substitute the following:

This work consists of furnishing and placing one or more courses of cold asphalt mix for a temporary roadway surface. This work also consists of furnishing and placing cold asphalt mix as a patching material for temporary roadway maintenance.

Construction Requirements

417.05 Placing. Add the following:

Place temporary asphalt with one 38 mm thick lift.

Measurement and Payment

417.08 Delete the text and substitute the following:

Do not measure Minor Cold Asphalt Mix for payment

417.09 Delete the text

Section 554. – REINFORCING STEEL**Construction Requirements**

554.08 Placing and Fastening. Delete the first sentence of the first paragraph and substitute the following:

Place, fasten, and support the bars according to the CRSI *Manual of Standard Practice*. Use precast concrete blocks or metal supports.

Section 562. – TEMPORARY WORKS**Material**

562.02 Delete the second sentence and substitute the following:

Furnish factory fabricated components of vertical shoring towers complying with the *Certification Program for Bridge Temporary Works* (FHWA-RD-93-033).

Construction Requirements

562.07 Maintenance and Inspection. Delete the text of this Subsection and substitute the following:

Inspect and maintain temporary works in an acceptable condition throughout the period of use.

In the presence of the CO, perform an in-depth inspection of temporary works not more than 24 hours before beginning each concrete placement or before allowing people to enter an excavation support structure. Inspect other temporary works at least once a month to insure they are functioning properly. Use a registered professional engineer to inspect cofferdams, shoring, support of excavation structures, and support systems for load tests before loading.

Furnish written results of the inspections to the CO before placing concrete, before allowing people to enter a cofferdam or excavation support structure, and before loading temporary works. Include a certification that the system meets the requirements of the contract and drawings.

Clearly mark the capacity of factory fabricated components of vertical shoring towers according to the *Certification Program for Bridge Temporary Works* (FHWA-RD-93-033). Make inspections and certifications for factory fabricated components of vertical shoring towers according to the *Certification Program for Bridge Temporary Works* (FHWA-RD-93-033).

Measurement and Payment**562.10** Delete the Subsection and substitute the following:

See Subsection 109.05

Measure temporary shoring per Section 208.

Do not measure all other temporary works for payment.

Section 601. - MINOR CONCRETE STRUCTURES**Material****601.02** Add the following:

Concrete coloring agents	711.05
Precast reinforced concrete box sections	706.07
Reinforcing fibers	725.29

601.03 Concrete Composition. Delete Table 601-1 and substitute the following:

Table 601-1
Composition of Minor Structure Concrete

Property	Specification
Cement content	362 kg/m ³ minimum
Water/cement ratio	0.49 maximum
Slump	125 mm maximum
Air Content	4% minimum
Size of coarse aggregate	AASHTO M43 with 100% passing the 37.5-mm sieve
28-day compressive strength	20.7 MPa minimum

Section 602. - CULVERTS AND DRAINS**Material****602.02** Add the following:

Precast concrete units	725.11
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Construction Requirements**602.03 General.** Add the following:

For the corrugated metal pipes requiring baffles, provide design to meet the required spacing and drag force (F_D) resistance specified on the plans.

Construct the baffles from structural steel plates, tubes, and shapes connected to pipe by bolts or welding. Design the steel components of the baffle assembly to meet current edition of AISC Steel Construction Manual, ASD method. Steel plates and shapes will conform to ASTM A36M, steel tubes to ASTM A500. Nuts, bolts, and washers will conform to ASTM A307 or A325M. Galvanize all steel components of the baffle assembly in accordance with AASHTO M111. Fabricate all steel components prior to galvanizing. Shop drill and apply galvanized coating to insides of all bolt holes as needed. Perform welding and weld qualification tests according to the provisions of AWS Structural Welding code, D1.1. If baffles are connected to pipe by bolting, provide minimum 6.4 mm thick neoprene gasket between connecting surfaces. Submit baffle design calculations and fabrication drawings to the CO for approval. Prepare and submit drawings in accordance to Subsection 104.03.

Do not use precast units unless included in the plans or approved by the CO.

602.05 Laying Metal Pipe. Add the following:

Provide bituminous or tack coating on all exposed metal pipe and metal end sections.

602.09 Add the following:

Measure pipe anchor assemblies as described in Section 606.

Section 609. – CURB AND GUTTER**Description****609.01** Add the following:

This work also consists of constructing paved ditches contiguous to the traveled way.

Construction Requirements**609.03 General.** Add the following:

For asphalt paved ditches, form the bed parallel to the finished surface of the ditch.

Add the following Subsection:

609.08A Asphalt Paved Ditch. Perform the work according to Section 404. Compact according to Subsection 404.07(a). Compact according to Subsection 404.07(b), only if paved ditch cannot be rolled safely.

Measurement

609.10 Add the following:

No separate measurement will be made for the asphalt mixture included in asphalt curb or paved ditch.

Measure paved ditches by the square meter width horizontally to include total width.

Measure curb by the linear meter.

Section 617. – GUARDRAIL

Construction Requirements

617.03 Posts. Delete the text of this Subsection and substitute the following:

Use steel posts with a total length of 2.4 meters.

Where the pavement surface is within 1 meter of the guardrail face, install posts before placing the pavement surface.

Drive all posts within the limits of the retaining walls. For posts outside of the retaining walls, posts may be driven or pilot holes may be used. Outside of the retaining walls, punch or drill holes no more than 15 millimeters larger than the post dimensions. Install the posts into the pilot holes and set the posts plumb. Backfill and compact around the posts with wall backfill material.

Where an impenetrable object is encountered, use a short post with a concrete anchor, decrease the post spacing, or nest two rail elements as approved by the CO. Do not change the post lengths and spacings in terminal sections.

617.05 Terminal Sections. Delete the third paragraph and substitute the following:

Use low speed, tangent and flared type terminals meeting Test Level _2. Submit drawings from the manufacturer for the terminal according to Subsection 104.03.

Section 623. – GENERAL LABOR

Delete the text of this Section and substitute the following:

Description

623.01 This work consists of furnishing workers and hand tools for construction work, survey crews, and/or furnishing qualified personnel to perform technical work ordered by the CO and not otherwise provided for under the contract.

Construction Requirements

623.02 Workers and Equipment. Furnish competent workers and appropriate hand tools for the work.

Obtain approval of the length of a workday and workweek before beginning the work. Keep daily records of the number of hours worked. Submit the records along with certified copies of the payroll.

623.03 Surveying Services. Furnish personnel, equipment, and material that conform to the requirements of Subsection 152.01. Perform Survey Services according to Section 152.

Survey and establish controls within the tolerances shown in Table 152-1, or within other tolerances as established by the CO.

Prepare field notes in an approved format. Furnish calculations. All field notes, supporting documentation, and calculations become the property of the Government upon completion of the work.

623.04 Office Technical Services. Furnish qualified engineering personnel experienced in highway construction and design, capable of performing in a timely and accurate manner. Provide personnel with a minimum of NICET Level II certification in highway design and construction, or State (SHA) or industry certification-related design and construction equivalent to their intended responsibilities. Personnel with 2 years or more of recent job experience in the type of highway design and construction provided for under the contract may be used in lieu of certifications. Provide the names and relevant experience of all personnel. Furnish supporting tools and equipment (e.g., calculator, computer, and software, and appropriate and commonly-used drafting tools for the assigned task).

All calculations, notes, and supporting documentation become the property of the government upon completion of the work.

623.05 Acceptance. Additional surveying services will be evaluated under Section 152.

Hired technical services will be evaluated under Subsections 106.02 and 106.04

Measurement

623.06 Measure the Section 623 items listed in the bid schedule according to Subsection 109.02 and the following as applicable.

Round portions of an hour up to the half hour. Measure time in excess of 40 hours per week at the same rate as the first 40 hours.

For surveying services, the minimum field survey crew is two persons. Measure surveying services by the crew hour. Do not measure time spent in making preparations, performing calculations, plotting cross-sections and other data, and processing computer data, and other efforts necessary to successfully accomplish the ordered survey services.

Do not measure time for worker's transportation time to and from the project site.

Measure office technical services by the hour as ordered by the CO for performing calculations, plotting cross-sections and other data, and processing computer data.

Payment

623.07 The accepted quantities will be paid at the contract price per unit of measurement for the Section 623 pay item listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

Section 624. — TOPSOIL**Description**

624.01 Delete the text of this Subsection and substitute the following: This work consists of furnishing and placing topsoil and forest duff in the wetland mitigation area and placing manufactured topsoil on completed slopes.

Material

624.02 Add the following:

Manufactured topsoil	713.01(c)
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Construction Requirements

624.04 Placing Topsoil. Delete the title and text of this Subsection and substitute the following:

624.04 Placing Topsoil and Forest Duff.

(a) Furnished Topsoil (Wetland Mitigation Area) and Manufactured Topsoil (Completed Slopes). Provide at least 7 days notice before the start of topsoil placement. Do not place topsoil

when the ground or topsoil is frozen, excessively wet, or otherwise in a condition detrimental to the work. Keep the roadway surfaces clean during hauling and spreading operations.

Spread topsoil to a depth that, after settlement, provides the required depth. For completed slopes, spread manufactured topsoil to a depth, after settlement, of 150 mm. See Wetland Mitigation Plans for required depth at Wetland Mitigation Site. Break clods and lumps with harrows, disks, or other appropriate equipment to provide a uniform textured soil. Remove and dispose of clods and stones larger than 50 millimeters, stumps, roots, and other litter according to Subsection 203.05.

Construct longitudinal depressions at least 50 millimeters deep and perpendicular to the natural flow of water without excessive compaction of the topsoil surface.

(b) Forest Duff. Do not place forest duff when the ground or topsoil is frozen, excessively wet, or otherwise in a condition detrimental to the work. Spread duff to a depth that, after settlement, provides the required depth.

In Zone E of the Wetland Mitigation area, distribute the stockpiled forest duff to a depth of at least 100 millimeters. Place felled trees on top of this duff in Zone E of the Wetland Mitigation area as directed by the CO.

624.05 Acceptance. Delete the second and third paragraphs and substitute the following:

Material for conserved and manufactured topsoil will be evaluated under Subsection 106.02.

Placing furnished and manufactured topsoil material will be evaluated under Subsections 106.02 and 106.04.

Measurement

624.06 Delete the third paragraph and substitute the following:

Measure placing manufactured topsoil by the cubic meter in the hauling vehicle.

Add the following:

Measure placing forest duff by the cubic meter in the hauling vehicle or by the hectare on the ground surface. Do not measure placement of felled trees.

Section 625. - TURF ESTABLISHMENT

Construction Requirements

625.03 General. Delete the first sentence and substitute the following:

Apply seed in the fall or spring, when soils are moist or expected to be moist soon after distribution.

625.07 Seeding**(b) Hydraulic method.** Add the following:

Apply seed mix at a total rate of 18 kg per hectare of native seed and 6 kg per hectare of cereal grain.

625.08 Mulching. Add the following:

Add the following:

For the Wetland Mitigation area only, do not mulch except as shown in Planting Plan Details.

Section 626. – PLANTS, TREES, SHRUBS, VINES, AND GROWDCOVERS**Material****626.02** Add the following:

Protective plant covers	713.08
Slow release fertilizer / mycorrhizal pack	713.03
Mulch	713.05(i)

Construction Requirements**626.03 General.** Add the following:

A qualified restoration contractor is required for preparation and installation of the mitigation wetland plants. Provide evidence to the CO for the approved restoration contractor to demonstrate the following qualifications:

- (a) Successful installation and establishment of a minimum of 3 riparian or wetland creation or restoration projects.
- (b) Proposed project manager and restoration ecologist possessing a minimum of 5 years experience in successfully installing and maintaining riparian habitat creation and/or restoration.

Allow 14 days for the approval process.

626.07 Setting Plants. Add the following:

For plants installed in the mitigation wetland:

- (1) Apply 75 millimeters of mulch (wood chips) around each plant
- (2) Place a 100 millimeter protective plant cover (tube) around each planting by inserting tube 51 millimeters to 75 millimeters into the ground with the remainder of the tube extending up the plant stem. If necessary, trim new plant growth with hand pruners to fit plant into tube.

Add the following:

(d) Hardwood Cuttings.

Obtain and plant hardwood cuttings as described below:

Collect hardwood cuttings from large, vigorously growing trees and/or shrubs following leaf drop in the fall and prior to bud swelling in the early spring. Arroyo willow and shining willow can be found along Hayfork Creek and its tributaries (preferred) or along Trinity River and its tributaries (alternative). Coordination with USFS personnel will be required if willow cuttings are to be obtained from the STNF.

Hardwood cuttings will be approximately 900 millimeters in length, with a minimum width of 19 millimeters at the cut base. Use live wood at least 2 years old, but not older than 7 years. No more than 1/3 of any individual plant should be harvested. Each cut should be made at an approximately 45-degree angle to the stem. The terminal end cut should be perpendicular to the stem to aid in correct orientation and facilitate planting. Remove the apical bud (bud at the tip of the branch) and several inches of the terminal end of the cutting. Trim off all side branches so the cutting is a single stem.

Store cuttings prior to planting by wrapping with a moist covering covered by an outer dry covering such as moist sawdust in a plastic bag, or store immersed in water. Store cuttings a maximum of one week prior to planting.

Treat each cutting prior to planting with a rooting hormone and fungicide, such as hormodin powder, by dipping the basal 2/3 of the cutting. Dry treat cutting prior to planting to minimize the loss of rooting hormone through handling and planting.

Augur a hole 150 to 250 millimeters in diameter to a maximum depth of 910 millimeters. Place cutting into the hole so that 150 to 200 millimeters of the cutting remain above the ground surface. Provide at least 3-4 bud scars on the cutting above the ground surface. Backfill the hole with soil and construct a 75 millimeters high x 300 millimeters diameter basin around each plant. Irrigate within 24 hours after planting to settle the soil.

626.08 Fertilizing. Add the following:

(c) For plant stock in the mitigation wetland area, add a slow release fertilizer / mycorrhizal pack to each planting hole with backfill mixture.

Measurement**626.15** Add the following:

Do not measure fertilizer, mulch and or other materials required for plantings in the wetland mitigation area.

Section 634. - PERMANENT PAVEMENT MARKINGS**Construction Requirements****634.03 General.** Delete the last sentence of the first paragraph and substitute the following:

For simple curve widening locations (widening only on one side) shift the centerline striping location such that the centerline stripe is midway between the normal edge of shoulders. The shift from the staked centerline will be towards the widened lane one-half the total curve widening specified for the given station as shown in the plans.

Add the following:

The Contractor may use, upon approval, permanent pavement marking materials and layouts meeting current state approved standards that are practiced in the region of the project in lieu of contract requirements, if the state standards meet the requirements of the MUTCD. The material substituted must be equivalent to that required in the specifications. Obtain the CO's approval before incorporating into the work. When requesting approval, furnish to the CO the applicable state standards (specifications and drawings), manufacturer's name and address, supplier's certification indicating material is produced to state approved specifications, pricing data showing cost difference for labor and materials, and any other available information describing application and performance. When directed, submit samples for approval at the Contractor's expense. Within 14 days, the CO will inform the Contractor as to the acceptance of the request. The unit price for the contract item(s) will be reduced to reflect any cost savings.

Section 635. - TEMPORARY TRAFFIC CONTROL**Construction Requirements**

635.07 Construction Signs. Add the following to the end of the first paragraph:

Provide the same type of sheeting on all post-mounted construction signs that pertain to the project.

635.09 Flaggers. Delete the title and text of this Subsection and substitute the following:

635.09 Traffic Workers

(a) Flaggers. Use flaggers certified by the American Traffic Safety Services Association, the National Safety Council, the International Municipal Signal Association, a state agency, or other acceptable organization. Perform the work described under MUTCD Part 6. Use type III, VII, VIII, or IX retroreflective sheeting on flagger paddles. Do not use flags.

(b) Police Officer. Provide a California State Highway Patrol Officer and vehicle to enforce project temporary traffic control measures at the direction of the CO.

635.13 Temporary Pavement Markings and Delineation. Delete the text of this Subsection and substitute the following:

Before opening a pavement surface to traffic, remove all conflicting pavement markings by sandblasting or other methods that do not damage the surface or texture of the pavement. Make removal pattern uneven so it does not perpetuate the outline of the removed pavement markings. Lightly coat sandblasted or removal areas on asphalt surfaces with emulsified asphalt.

Provide pavement markings or delineation and signing according to Section 156, the MUTCD, and project plans. Install and maintain temporary pavement markings that are neat, crack free, true, straight, and unbroken.

For seasonal suspensions, apply permanent pavement marking pattern with temporary traffic paint.

Install permanent pavement markings within 14 days. If permanent pavement markings are not placed within 14 days, provide, at no cost to the contract, additional temporary delineation equivalent to the permanent pavement marking pattern required by the contract. Do not apply temporary traffic paint to the final surface.

For temporary pavement markings, use preformed retroreflective tape, traffic paint, or temporary raised pavement markers as follows:

(a) Temporary Markings. For temporary pavement markings, use preformed retroreflective tape, traffic paint, or temporary raised pavement markers as indicated in the plans and as follows:

(1) Preformed retroreflective tape. Apply according to the manufacturer's instructions. Remove all loose temporary preformed retroreflective tape before placing additional pavement layers.

(2) Temporary traffic paint. Apply temporary traffic paint at a 0.38-millimeter minimum wet film thickness (0.38 liters per square meter). Immediately apply type 1 glass beads on the paint at a minimum rate of 0.7 kilograms per liter of paint.

(3) Raised pavement markers. When chip seals, slurry seals, or tack coats are used after marker placement, protect the markers with an approved protective cover, which is removed after the asphalt material is sprayed.

Remove all temporary pavement markers before placing additional pavement layers. Remove all temporary pavement markings from the surface course before placing permanent pavement markings.

(b) Delineation for Unmarked Pavements with Vehicle Positioning Guides. For ADT's greater than 1000, vehicle positioning guides may be used in lieu of temporary markings for the delineation of unmarked pavements for a period of no longer than 3 days. For ADT's of 1000 or less, vehicle positioning guides may be used in lieu of temporary markings for the delineation of unmarked pavements for the full 14 day temporary marking period.

For unmarked pavements, install signing and vehicle positioning guides as indicated on plan sheet M635-2. Use vehicle positioning guides that meet the requirements of Subsection 718.21(b), raised pavement markers.

Remove all vehicle positioning guides before placing additional pavement layers. Remove all vehicle positioning guides from the surface course before placing permanent pavement markings.

Measurement

635.26 Delete the tenth paragraph and substitute the following:

Measure temporary pavement markings by the kilometer along the centerline of the roadway. Measure temporary pavement markings as a single measurement, inclusive of all markings, from end to end regardless of color, material type, or number of lines. Do not deduct for standard gaps between stripes. Measure only one application of temporary pavement markings per lift.

Measure vehicle positioning guides used at the option of the Contractor in lieu of temporary markings as equivalent temporary pavement markings. When vehicle positioning guides exceed the period of use stated in the plans, provide additional temporary or permanent pavement markings at no cost to the Government. Measure vehicle positioning guides by the kilometer

along the centerline of the roadway. Measure as a single measurement, inclusive of all markings, from end to end regardless of material type, gaps or number of lines. Measure only one application of vehicle positioning guides per lift. “DO NOT PASS”, “PASS WITH CARE”, and “NO CENTER STRIPE” signs required to be used with vehicle positioning guides are subsidiary to the temporary pavement marking item. Do not measure these signs as construction signs.

Add the following:

Measure Temporary traffic control, police officer by the day. This will include travel time to and from the project site each day hired as well as use of CHP vehicle.

Measure Traffic and safety supervisor by the week.

Add the following Section:

Section 651. – DRAPED ROCKFALL PROTECTION

Description

651.01 This Work consists of constructing wire mesh to restrain rock fall as designated on the Plans.

Material

651.02 Conform to the following Subsections and requirements:

Grout	725.22 (c)
Rock Dowel	261

(a) Wire Rope. Wire Rope will be a minimum of 15 mm diameter, galvanized steel wire strand, common grade, type one coating, conforming to the requirements of ASTM A475 - Zinc Coated Steel Wire Strand with a minimum breaking strength as shown on the plans.

(b) Wire Rope Clips. Wire rope clips will be compatible with the cable sizes shown in the plans. The bases will be drop forged carbon steel and the nuts will be of the heavy-duty hexagonal type. All components will be galvanized in accordance with ASTM A153.

(c) Mesh Anchors. Mesh anchors will conform to the requirements of Section 261, Rock Dowels, and Grade 520. Rope anchors may be used in lieu per the mesh or netting manufactures recommendations. Bars will be epoxy coated for corrosion protection.

(d) Nuts. Nuts will be heavy duty, conforming to the requirements of ASTM A325 Grade B. Nuts will develop an ultimate strength of not less than 125 percent of the minimum yield strength of the bar. Nuts will be epoxy coated for corrosion protection.

(e) Washers. Washers will conform to the requirements on ASTM A325 quenched and tempered to a Rockwell hardness of C38 to C45. The round center hole will be 3mm larger in diameter than the mesh anchor to be used. Washers may be flat, beveled, or spherical seat washers as required, and will be placed between the plate and the nut. Washers will be epoxy coated for corrosion protection.

(f) Bearing Plates. Steel bearing plates will conform to ASTM A36. Bearing plates will be epoxy coated for corrosion protection.

(g) Grout. Non-shrink cement grout will be used for the mesh anchors.

(h) Draped Wire Mesh. Wire mesh will be of the 8 x 10 double twist hexagonal netting type, zinc and PVC coated in accordance with ASTM A153. The color of the PVC coating will be dark brown as approved by the CO. Wire used in the body of the mesh and lacing wire will be U.S. gauge 9 or equivalent in diameter, after coating.

(i) Mesh Pins. Mesh pins are expansion anchors used to keep wire mesh within 0.6 m of rock face to reduce the height distance which rock fall can occur.

(j) Samples. One sample of the type of wire mesh, ground anchor, and hardware to be used will be submitted to the CO from the normal stock of the manufacturer. The samples will be submitted together with mill reports indicating tensile yield point and elongation results of the ground anchors, and the tensile and punching tests of the wire mesh at no additional expense to the Government.

The following certificates will be submitted to the CO at least two weeks prior to beginning work.

1. Certificates stating that samples for testing are from normal stock, which will be used in the work.
2. Manufacturer's certified test results of set time, shelf life, and compressive strength for each type of grout to be used.
3. The Contractor will furnish a certified report, not more than one year old, that the product to be supplied equals or exceeds these specifications.

Construction Requirements

651.03 General. Safety of the work will be the responsibility of the Contractor. The work will be performed in a manner to minimize hazards and exposure of the public, construction personnel, and equipment to hazardous and potentially hazardous conditions. Placement of the wire mesh will be scheduled so as to ensure safety.

651.04 Installation.

(a) Scaling. The Contractor will scale slope faces as directed by the CO.

(b) Mesh or Rope Anchors. The hole diameter for each anchor installation will be uniform for the entire length of the hole unless otherwise approved by the CO. The minimum hole diameter will be as shown on the Plans.

The drilling equipment will be capable of drilling a straight hole to the depths required, and will be equipped to inject air into the hole through the bit.

Holes will be drilled at the orientations and inclinations shown in the plans or as directed by the CO. Deviation from those orientations and inclinations will not exceed five degrees. The Contractor will use a measuring device to assure the required inclinations in the vertical plane.

(c) Clearing of the vegetation, brush and trees is required for the placement of mesh and anchors. The clearing of the vegetation will be required on the slopes and brow to be meshed. The cleared material will be disposed of offsite or mulched for distribution on the project or on the seeded slopes.

(d) Each hole will be cleaned of all drill cuttings, sludge, and debris by means of compressed air introduced at the back of the hole prior to installation of the cement grout.

After the drill hole is cleaned, a sufficient amount of cement grout will be placed in the drill hole to fully encapsulate the anchor bar.

(e) Mesh or rope anchors will be spaced as shown on the plans. Ground conditions encountered as construction progresses may require the lengths of the anchors to be greater than the minimum length shown on the Plans. Where the varied lengths are to be utilized, the use of steel bolt couplings (or other approved methods as recommended by the manufacturer) will be permitted.

A minimum of two centralizers will be placed on each anchor to position the bar within 25 mm of center of the drill hole. The centralizers will be placed within 0.6 m from the top and bottom of the drill hole. The centralizers will be attached securely to the anchor bar so they will not shift during handling or insertion into the drill hole.

(f) Draped mesh and netting will extend down the face to the height specified on the Plans and will be anchored to the top of the slope with mesh or rope anchors.

(g) Wire rope will be connected to the end anchors as shown in the Plans. The ends of the wire rope will be secured with wire rope clips. The wire rope clips will be placed in the configuration and torqued as recommended by the manufacturer. The wire mesh will be folded around the anchorage cable and folded upon itself a minimum of 0.6 m and secured using locking clips or hog rings.

(h) The slope protection wire mesh will be securely selvaged or bound so that the joints formed by tying the selvages have minimum strength equal to that of the body of the mesh. Fasteners, ties, connectors, locking clips, or hog rings used for fastening edges will be spaced 150 mm apart or less. Perimeter edges will be laced with binding wire by tightly looping through every mesh opening.

(i) Mesh pins will be installed to keep mesh within 0.6 m of the rock cut face or as directed by the CO. Mesh pins will be installed per manufacture's recommendations for concrete applications as appropriate.

651.05 Acceptance. Draped rockfall protection material and construction will be evaluated as follows:

Material for the Draped rockfall protection will be evaluated under Subsections 106.03 and 106.04.

Construction of Draped rockfall protection will be evaluated under Subsections 106.02 and 106.04.

Measurement

651.06 Measure draped wire mesh by the square meter completed in place exclusive of the area of wire mesh used in any overlaps.

Payment

651.07 The accepted quantities, measured as provided above, will be paid at the contract price per unit of measurement for the Section 651 items listed in the bid schedule. Payments will be full compensation for the work prescribed in this Section. See Subsection 109.05.

Section 702. - ASPHALT MATERIAL

702.03 Emulsified Asphalt. Add the following:

(e) Other emulsified asphalts. Other emulsified asphalts not covered by item **(a)** through **(d)** will conform to the following:

(1) Saybolt furol viscosity at 50°C, AASHTO T 59	15 - 150 sec
(2) Settlement, AASHTO T 59	1% max.
(3) Residue by distillation, AASHTO T 59	65% min.
(4) Oil Distillate by volume, AASHTO T 59	25% max.

(5) Solubility in trichloroethylene, AASHTO T 44 97.5 % min.

Section 703. – AGGREGATE

703.02 Coarse Aggregate for Concrete. Delete the text of this Subsection and substitute the following:

Conform to AASHTO M 80 class A including the restriction on reactive materials, except as amended or supplemented by the following:

Add the following:

In addition to the requirements under **703.01** and **703.02** the following will also apply to fine and coarse aggregate for concrete.

Fine and Coarse Aggregate for Concrete.

Alkali reactivity of aggregates (Mortar bar method), ASTM C 1260 0.10% max.

Aggregates tested by ASTM C 1260, which exhibit mortar bar expansions less than 0.10 % at 16 days after casting, are considered innocuous and may be used.

Aggregates tested by ASTM C 1260 which exhibit mortar bar expansions between 0.10 and 0.20 % at 16 days after casting may be used if acceptable supplemental information is submitted which confirms that mortar bar expansions are not caused by alkali-silica reactions. Acceptable supplemental information includes:

- A report of petrographic examination of the aggregate by ASTM C 295 performed within one year from the time of submittal which contains quantifiable data and conclusions verifying that the aggregate is not potentially deleteriously reactive with cement

or

- A report of petrographic examination of the ASTM C 1260 mortar bar samples by ASTM C 856 which contains quantifiable data and conclusions verifying that the aggregate is not potentially deleteriously reactive with cement and that the mortar bar reaction products are not due to alkali-silica reaction.

Aggregates tested by ASTM C 1260 which exhibit mortar bar expansions more than 0.20 % at 16 days after casting ***or*** aggregates exhibiting expansions between 0.10 and 0.20 % at 16 days after casting that have been found to be potentially deleteriously reactive by acceptable supplemental information may be used if additional supplemental information is submitted which confirms that effective mitigation measures utilizing supplementary cementitious

- Data and test results by ASTM C 1567 which confirm that concrete mix design combinations of cement, fly ash, and silica fume and/or ground iron blast furnace slag exhibit expansions less than 0.10 % at 16 days after casting. Lithium compounds shall not be used.

- Data and test results by ASTM C 1567 which confirm that concrete mix design combinations of cement, fly ash, and silica fume and/or ground iron blast furnace slag exhibit expansions less than 0.10 % at 16 days after casting. Lithium compounds shall not be used.

(a) General. Delete lines (3), (4), (5), and (6) and substitute the following:

- Table 703-2 Target Value Ranges for Subbase and Base Gradation.** Delete reference to the “436-74(6)” percent by mass passing the 4.75 millimeter sieve for grading E (base) and substitute “36-74 (6)”.

- | | |
|--|----------|
| (1) Los Angeles abrasion, AASHTO T 96 | 50% max. |
| (2) Fractured faces, one or more, ASTM D 5821 | 50% min. |
| (3) Free from organic matter and lumps or balls of clay | |
| (4) Liquid Limit, AASHTO T 89 | 35 max. |

(5) Dust ratio: $\frac{\% \text{ passing } 75\mu\text{m}}{\% \text{ passing } 425\mu\text{m}}$ 2/3 max.

(6) Gradation and plasticity index, AASHTO T 90 Table 703-3

Do not use material that breaks up when alternately frozen and thawed or wetted and dried.

Obtain the aggregate gradation by crushing, screening, and blending processes as necessary. Fine aggregate, material passing the 4.75 mm sieve, will consist of natural or crushed sand and fine mineral particles.

Do not furnish material that contains asbestos fibers.

Table 703-3
Target Value Ranges for
Surface Course Gradation and Plasticity Index

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)
19.0 mm	100 ⁽¹⁾
4.75 mm	41-71 (7)
425 μm	*(5)
75 μm	9-16 (4)
Plasticity Index (PI)	8 (4)

⁽¹⁾ Statistical procedures do not apply.

(*) Submit target values for applicable sieves

() Allowable deviations (+/-) from the target values

703.07 Hot Asphalt Concrete Pavement Aggregate. Delete the Subsection and substitute the following:

(a) Coarse aggregate (retained on a 4.75 mm sieve). Delete lines (3) and (4) and substitute the following:

(3) Fractured faces, one or more, ASTM D 5821 75% min.

(4) Liquid limit, AASHTO T 89 25 max.

(5) Adherent coating, FLH T 512 1% max.

(b) Fine aggregate (passing a 4.75 mm sieve). Delete lines (1) and (2) and substitute the following:

(1) Liquid Limit, AASHTO T 89 25 max.

703.17 Superpave Asphalt Concrete Pavement Aggregate. Delete lines (c), (d), (e), and (f) and substitute the following:

- | | |
|---|----------|
| (c) Fractured faces, one or more, ASTM D 5821 | 90% min. |
| (d) Fine aggregate angularity, AASHTO T 304, method A | 40% min. |
| (e) Flat and elongated particles, 1:3 ratios. +9.5 mm sieve, calculated by mass, weighted average, ASTM D4791 | 10% max. |
| (f) Sand equivalent AASTHO T 176, referee method | 45 min. |

Section 704. – SOIL

704.02 Bedding Material. Delete the text and substitute the following:

- | | |
|--|---|
| (a) Maximum particle size | 12.5 mm or half the corrugation depth, whichever is smaller |
| (b) Material passing 75-μm sieve, AASHTO T 27 and T 11 | 10% max. |

704.03 Backfill Material. Add the following:

(c) For curb backfill

- | | |
|---------------------------|---------|
| (1) Maximum particle size | 37.5 mm |
|---------------------------|---------|

704.10 Select Granular Backfill

(a) Quality requirements. Delete line (2) and substitute the following:

- | | |
|---|----------|
| (2) Shear maximum angle of internal friction on the portion passing the 4.75 mm sieve, AASHTO T 236 | 34° min. |
|---|----------|

Add the following:

- | | |
|---------------------------------------|----------|
| (5) Liquid limit, AASHTO T 89 | 30 max. |
| (6) Los Angeles abrasion, AASHTO T 96 | 50% max. |

(b) Electrochemical requirements for MSE walls with metallic reinforcements. Delete the Note and substitute the following:

Note: Tests for sulfate and chloride content are not required when the pH is between 6.0 and 8.0 and resistivity is greater than 5000 ohm centimeters.

Add the following Subsection:

704.13 Wall fill soils.

(a) Select wall backfill. Furnish sound, durable, granular soil free from organic matter or other deleterious material (such as shale or other soft particles with poor durability). Conform to the following:

(1) Quality requirements.

(a) Gradation	Table 704-6
(b) Shear maximum angle of internal friction on the portion passing the 4.75 mm sieve, AASHTO T 236	34° min.
Note: Compact samples for AASHTO T 236 to 95 percent of the maximum density determined according to AASHTO T 99 method C.	
(c) Sodium sulfate soundness loss (5 cycles)	15% max.
(d) Los Angeles abrasion, AASHTO T 96	50% max.
(e) Liquid limit, AASHTO T 89	30 max.
(f) Plastic index, AASHTO T 90	6 max.

(2) Electrochemical requirements

(a) Resistivity, AASHTO T 288	3000 Ω -cm min.
(b) pH, AASHTO T 289	5.0 to 10.0
(c) Sulfate content, AASHTO T 290	200 ppm max.
(d) Chloride content, AASHTO T 291	100 ppm max.

Notes:

- (1) Tests for sulfate and chloride content are not required when pH is between 6.0 and 8.0 and the resistivity is greater than 5000 ohm centimeters.
- (2) Electrochemical requirements are not applicable to geogrid-reinforced walls. Refer to Subsection 720.01(k) for durability design requirements.

Table 704-6
Select Wall Backfill Gradation

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)
100 mm	100
75 mm	75 – 100
4.75 mm	30 – 75
0.075 mm	0 – 25

(b) Wall backfill. Furnish granular soil free from organic matter or other deleterious material (such as shale or other soft particles with poor durability) conforming to AASHTO soil classifications A-1, A-3, or A-2-4. Remove all rock particles and hard earth clods larger than 300 millimeters in the longest dimension.

(c) Wall facing fill. Furnish sound, durable, and pervious granular soil free from organic matter or other deleterious material (such as shale or other soft particles with poor durability) conforming to the following:

(1) Quality requirements.

(a) Gradation	Table 704-7
(b) Sodium sulfate soundness loss (5 cycles)	15% max.
(c) Los Angeles abrasion, AASHTO T 96	50% max.

Table 704-7
Wall Facing Fill

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)
150 mm	100
50 mm	0 – 5

Section 705. - ROCK

705.01 Gabion and Revet Mattress Rock. Add the following:

(d) Los Angeles abrasion, AASHTO T 96	50% max.
--	----------

705.02 Riprap Rock. Delete lines (a), (b), (c), (d), and substitute the following:

(a) Apparent specific gravity, AASHTO T 85	2.40 min.
(b) Absorption, AASHTO T 85	4.0% max.

- (c) Los Angeles abrasion, AASHTO T 96 50% max.
- (d) Gradation for the class specified Table 705-1

Section 706. - CONCRETE AND PLASTIC PIPE

706.08 Plastic Pipe.

(d) Corrugated polyethylene drainage tubing. Delete the title and text and substitute the following:

(d) Drainage pipe. Furnish polyethylene perforated or non-perforated corrugated plastic pipe conforming to AASHTO M 252. Furnish perforated or non-perforated polyvinyl chloride pipe with smooth interior, smooth or ribbed exterior conforming to AASHTO M 278, ASTM F 758, or ASTM F 949.

Section 709. – REINFORCED STEEL AND WIRE ROPE

709.01 Reinforcing Steel.

(b) Reinforcing bars. Delete the text and substitute the following:

Furnish deformed, grade 420 bars conforming to AASHTO M31M or M322M.

(d) Tie bars. Delete the text and substitute the following:

Furnish deformed, grade 420 bars conforming to AASHTO M31M.

(e) Hook bolts. Delete the text and substitute the following:

Furnish deformed, grade 420 bars conforming to AASHTO M31M with M14 rolled threads or M16 cut threads. Furnish a threaded sleeve nut capable of sustaining a minimum axial load of 67 kilonewtons.

Section 710. — FENCE AND GUARDRAIL

710.09 Guardrail Posts. Add the following:

Use 2.4 meter [8-ft] long steel posts.

Section 713. – ROADSIDE IMPROVEMENT MATERIAL**713.01 Topsoil.** Add the following:

(c) Manufactured topsoil. Manufacture topsoil by mixing wood chips with the conserved topsoil at a ratio of 50/50. Use other on-site soils as approved by the CO if there is not enough conserved topsoil.

713.03 Fertilizer. Add the following:

Fertilizer for wetland mitigation site: Furnish slow release organic fertilizer package with mycorrhizal fungi.

Furnish 10 gram biodegradable slow release organic fertilizer package containing a blend of approximately:

16.00% Total Nitrogen (N)
6.00% Available Phosphoric Acid (P_2O_5)
8.00% Soluble Potash (K_2O).

Packet should also contain minor nutrients in approximately the following amounts:

4 % Combined Sulfur (S)
0.06% Zinc (Zn)
0.16% Iron (Fe)
0.54% Magnesium (Mg)
0.04% Copper (Cu)
0.05% Boron (B)
4% Manganese (Mn).

Coat the Nitrogen, Phosphorous and Potassium sources with a polyurethane coating to provide approximately 15.7% coated slow release Nitrogen, 5.1% coated slow release available Phosphate and 6.80% slowly available soluble Potash.

713.04 Seed. Add the following:

Native seed for the turf establishment of completed slopes (permanent seed) as well as temporary seeding will be government furnished. Furnish cereal grains (wheat or barley). Permanent seed will consist of 80% native seed and 20% cereal grain. Temporary seed will consist of 33%

native seed and 67% cereal grain. Coordinate with the Forest Service, Shasta-Trinity NF Office for pick-up of native seed. The contact to obtaining seed is:

Susan Erwin
Westside Botanist
Weaverville Ranger District
PO Box 1190
Weaverville, CA 96093
530-623-1753
serwin@fs.fed.us

713.05 Mulch. Add the following:

(i) Wood Chips. Chipped non-merchantable timber (slash) small enough to make manufactured topsoil.

713.08 Miscellaneous Planting Material. Add the following:

(h) Protective plant covers (tubes). Furnish protective plant covers of the rigid mesh tube variety with a 100 mm diameter.

713.13 Erosion Control Bales, Wattles, Logs, and Rolls. Add the following:

Furnish certified weed free materials that is free from mold or other objectionable material.

713.16 Silt Fence. Add the following:

Wire or polymeric support mesh is required in accordance with AASHTO M 288.

Section 714. – GEOTEXTILE AND GEOCOMPOSITE DRAIN MATERIAL

714.01 Geotextiles.

(a) Physical requirements. Add the following:

- (7) Type VII-A Geogrid
- (8) Type VII-B Geogrid

Table 714-7
Table 714-7

714.02 Geocomposite Drains.

(b) Geocomposite sheet drains. Add the following:

For MSE wall construction, furnish prefabricated sheet drain with a core or net encapsulated in a Type I-D (Subsection 714.01) non-woven geotextile. Provide a sheet drain capable of draining

from both sides of the sheet and a minimum flow rate of 1 liter per second per meter of width when tested according to ASTM D 4716. Perform the test under the following test conditions:

- (1) 300 millimeter long specimen
- (2) Pressure of 100 kPa
- (3) Gradient of 1.0
- (4) 100-hour seating period
- (5) Closed-cell foam rubber between platens and geocomposite

Add the following:

714.03 Geogrid. Furnish geogrid reinforcement with a regular network of integral connected polymer tensile elements having aperture geometry and junction strength to sufficiently permit significant mechanical interlock with the surrounding soil or rock. Provide geogrid with a structure dimensionally stable and able to retain its geometry under manufacture, transport, installation, ultraviolet degradation, and all forms of chemical and biological degradation encountered in the soil being reinforced.

(a) Physical requirements. Provide geogrids composed of fibers or ribs that are at least 85% by weight polyethylene, polypropylene or polyester. Form a network of fibers that will retain dimensional stability. Conform to the physical requirements in Table 714-7. Units are given in English for procurement purposes.

Table 714-7
Geogrid Physical Requirements

Property	Test Method	Minimum Acceptable Values	
		Type VII-A	Type VII-B
Wide width tensile strength (ultimate), lb/ft	ASTM D 4595	4,800/1,500 ⁽¹⁾	1,100/1,100 ⁽¹⁾
Wide width tensile strength (5% strain), lb/ft	ASTM D 4595	1,500/500 ⁽¹⁾	300/300 ⁽¹⁾
Maximum aperture size, inches	----- ---	1.0/1.0 ⁽¹⁾	0.5/0.5 ⁽¹⁾
Weight, oz/yd ²	ASTM D 5261	9	4
Resistance to soil burial	ASTM D 3083	No change	No change
Long Term Design Strength, lb/ft	GRI:GG4	2,000 ⁽²⁾	500 ⁽²⁾

(1) Machine Direction/Cross Machine Direction

(2) Principle strength (highest strength) direction

Identify, store, and handle geogrid according to ASTM D 4873-88. Limit geogrid exposure to ultraviolet radiation to less than 10 days.

(b) Evaluation procedures. Geogrid will be evaluated under Subsection 106.03. Furnish to the CO three copies of a commercial certification that the geogrid supplied meets the respective index criteria, measured in full accordance with all test methods and standards set forth in these specifications. State on the commercial certification the name of the manufacturer, product name, style number, chemical composition of the filaments, ribs, or yarns, and other pertinent information to fully describe the geogrid. Attest the certification by a person having legal authority to bond the manufacturer. In case of dispute over validity of values, the CO can require the contractor to supply test data from an agency approved laboratory to support the certified values submitted.

When samples are required, remove a 0.9 m (3-foot) long, full-width sample from beyond the first outer wrap of the roll. Label the sample with the lot and batch number, date of sampling, project number, item number, manufacturer, and product name.

Manufacturing Quality Control: The manufacturer is responsible for establishing and maintaining a quality control program to ensure compliance with the requirements of this specification.

Perform conformance testing as part of the manufacturing process; testing may vary for each type of product. Consider the Table 714-8 for applicable index tests as a minimum for an acceptable QA/QC program.

Table 714-8
Minimum Index Tests for QA/QC

Property	Test Method	Minimum Conformance Requirement
Specific Gravity (HDPE only)	ASTM D-1505	To be provided by the material supplier of specialty company
Wide Width Tensile	ASTM D-4595	
Melt Flow (HDPE and PP only)	ASTM D-1238	
Intrinsic Viscosity (PET only)	ASTM D-4603	
Carboxyl End Group (PET only)	ASTM D-2455	
Single Rib Tensile (geogrids)	GRI:GG1	

Section 718. - TRAFFIC SIGNING AND MARKING MATERIAL**718.14 Waterborne Traffic Paint.**

(g) Daylight reflectance. (without glass beads) Delete the text and substitute the following:

- | | |
|-------------------------|--|
| (1) White, ASTM E 1347 | 84% relative to magnesium oxide standard |
| (2) Yellow, ASTM E 1347 | 55% relative to magnesium oxide standard |

Section 720. – STRUCTURAL WALL AND STABILIZED EMBANKMENT MATERIAL

720.01 Mechanically-Stabilized Earth Wall Material. Add the following:

(k) Geogrid. Furnish geogrid reinforcement with a regular grid structure with apertures of sufficient size to allow interlocking with surrounding soil, rock, or earth. Manufacture geogrid using high-density polyethylene, polypropylene, or polyester. Calculate long-term tensile strength “ T_{al} ” and pullout capacity of geogrids according to FHWA publication No. FHWA-NHI-00-043, entitled “Mechanically Stabilized Earth Walls and Reinforced Soil Slopes Design and Construction Guidelines.” The long-term tensile strength “ T_{al} ” must take into account reduction factors “RF” for creep (RF_{CR}), durability (RF_D), and installation damage (RF_{ID}) as defined in FHWA-00-043.

Section 725. - MISCELLANEOUS MATERIAL

725.19 Plastic Lining. Add the following:

Provide geomembrane types with 36mil reinforced Polypropylene lining.

Polypropylene lining consist of 64.5 inch (163.8 centimeters) minimum widths of manufactured Polypropylene sheeting fabricated into large panels by means of special factory bonded seams.

Provide polypropylene sheeting that is manufactured from a composition of high quality ingredients suitably compounded for use in hydraulic structures. Do not use reprocessed or reground materials.

The Polypropylene membrane shall consist of thoroughly mixed Polypropylene compound. It shall be manufactured by the calendaring process and shall be uniform in color, thickness, size and surface texture.

The sheeting shall contain no undispersed materials, divots, deep gas checks and shall exhibit cold flow.

The Polypropylene shall be made by encapsulating reinforcing polyester fabric (scrim) between two sheets of Polypropylene.

The sheeting shall be flexible, durable, watertight product free of pinholes, blisters, holes and contaminants.

The material shall have the minimum physical property characteristics as outlined in the following table. Units are given in English for procurement purposes.

Table 725-1
Reinforced Polypropylene

Property		Test Method	Values	
Thickness (mils nominal)		ASTM D751	36	45
Piles Reinforcing			1	1
Breaking Strength (lbs min)	Warp (MD) Fill (TD)	ASTM D751, Method A ASTM D751, Method A	275 250	275 250
Tear Strength (lbs min)	Warp (MD) Fill (TD)	ASTM D751, Tongue Tear ASTM D751, Tongue Tear	70 lbs 70 lbs	70 lbs 70 lbs
Low Temperature (Degrees F)		ASTM D2136 (1/8" Mandrel, 4 hours)	-65°	-65°
Dimensional Stability (% Δ Max)		ASTM D1204 (180°F/1 hr)	1&	1%
Hydrostatic Resistance (psi min)		ASTM D751, Method A	350 psi	350 psi
Ply Adhesion (lbs/in min)		ASTM D413	25 lbs	25 lbs
Puncture Resistance		FTMS 101C, Method 2031	300 lbs	300 lbs
Water Absorption (max % wt Δ)		ASTM D471	<1%	<1%
UV Resistance (12,000 Hours)		ASTM G26, Xenon Arc @ 80°C)	Pass	Pass
Resistance to Soil Burial (% Tensile Retention)		ASTM D3083 (Part 9.5)	90% min	90% min
Factory Seam Properties				
Bonded Seam Strength		ASTM D751	200 lb min	200 lb min
Peel Adhesion (lbs/in min)		ASTM D413	20 lbs/in	20 lbs/in

725.29 Reinforcing Fibers. Delete the text and substitute the following:

When reinforcing fibers are specified, conform to the following:

(b) Use with concrete. Fibers will be fully oriented, 100% virgin polypropylene, collated fibrillated, white in color, 38 mm long, dosed at 0.9 kilograms per cubic meter of concrete, conforming to ASTM C 1116.

APPENDICES

CA PFH 114-1(1)
Hyampom Road

APPENDIX A: Timber Sale Contract & Appraisal Summary

APPENDIX B: U.S. Department of the Army, Corps of Engineers 404 Permit

APPENDIX C: CALTRANS Encroachment Permit

APPENDIX D: NPDES Permit

Appendix A

Timber Sale Contract & Appraisal Summary

UNITED STATES DEPARTMENT OF AGRICULTURE
Forest Service

TIMBER SALE CONTRACT
DIVISION BT

June 2006
(Date of Issue)

STANDARD PROVISIONS FOR TIMBER SALES TO BE MEASURED BEFORE FELLING

This Division is organized into Parts, Sections, Subsections, and Items. These are numbered in accordance with the following scheme: Part BT1.0, Section BT1.1, Subsection BT1.11, and Item BT1.111. References to a Part include all Sections, Subsections, and Items within that Part; references to a Section include all Subsections and Items within that Section; and references to a Subsection include all Items within that Subsection. Cross-references within this contract cite the reference number of the applicable Division, Part, Section, Subsection, and Item. Descriptive headings used

are not to be considered in determining the rights and obligations of the parties.

The Standard Provisions in this Division are subject to Specific Conditions of the contract stated in Division AT. Wherever appropriate, Specific Conditions established in Division AT are cited by reference number. The listing of Sections, Subsections, or Items of this Division in AT18 has the effect of striking or deleting them from Division BT. AT19 lists Special Provisions that comprise Division CT. Where appropriate, references to Special Provisions are made by citing the applicable reference numbers.

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BT1.0—SALE AREA

BT1.1 Sale Area Map. The boundaries of “Sale Area” and any Payment Unit thereof, are as shown on the attached “Sale Area Map” that is made a part hereof, and were, before timber sale advertisement, designated on the ground by Forest Service to meet the anticipated needs of the parties. The location of Sale Area and its approximate acreage are stated in AT1. Payment Units may be revised and additional ones may be established only by written agreement. Upon Purchaser’s request, Forest Service shall subdivide Payment Units to reduce them to a size that can be logged within 60 days at Purchaser’s normal rate of logging. However, the rate of logging used in such adjustment of Payment Unit size shall not be less than a rate necessary for removal of all Included Timber during Normal Operating Seasons prior to Termination Date. Payment Units or cutting units may be eliminated from Sale Area under conditions described in BT6.36. Catastrophically Damaged areas may be removed from Sale Area under BT8.32.

Where applicable, the following are also identified on Sale Area Map:

- (a) Identified claims limiting Purchaser’s rights under BT1.2;
- (b) Payment Units where timber is to be Measured or Marked after date of timber sale advertisement and approximate location of sample Marked timber under BT2.36 and BT2.4;
- (c) Boundaries of Clearcutting Units, Overstory Removal Units, and Understory Removal Units under BT2.3;
- (d) Diameter limits for Overstory Removal Units and Understory Removal Units under BT2.33 and BT2.34;
- (e) Areas where leave trees are Marked to be left uncut under BT2.35;
- (f) Specified Roads listed in AT7;
- (g) Sources of base course, surface rock, and rock riprap listed in the Schedule of Items under CT5.221;
- (h) Roads where log hauling or use is prohibited or restricted under BT5.12;
- (i) Roads and trails to be kept open under BT6.22;
- (j) Improvements to be protected under BT6.22;
- (k) Locations of known wildlife or plant habitat and cave resources to be protected under BT6.24;
- (l) Locations of areas known to be infested with specific invasive species of concern under BT6.35;
- (m) Maximum stump heights when more than one height is listed by areas in AT6 under BT6.412;
- (n) Skidding or yarding methods specified under BT6.42;
- (o) Streamcourses to be protected under BT6.5;
- (p) Locations of meadows requiring protection under BT6.61;
- (q) Locations of wetlands requiring protection under BT6.62;
- (r) Locations of temporary roads to be kept open under BT6.631; and
- (s) Other features required by Division BT or CT.

BT1.2 Claims. Valid claims are excluded from Sale Area, except those on which timber cutting is authorized

in writing by the claimant and except mining claims on which cutting is authorized by the Act of July 23, 1955 (30 USC 614). Claims that limit Purchaser’s rights to operate under this contract and that Forest Service has been able to identify are shown on Sale Area Map. Purchaser is not obligated to operate contrary to existing claim limitations. Forest Service shall designate boundaries of claims on the ground to the extent necessary to identify Included Timber.

BT2.0—TIMBER SPECIFICATIONS

BT2.1 Included Timber. “Included Timber” consists of:

BT2.11 Standard Timber. Live and dead trees and portions thereof that meet Utilization Standards under BT2.2 and are designated for cutting under BT2.3.

BT2.12 Substandard Timber. Live and dead trees that:

- (a) Do not meet Utilization Standards and
- (b) Are located in Clearcutting Units or construction clearings or are otherwise designated for cutting.

BT2.13 Damaged Timber.

BT2.131 Damaged by Purchaser. Undesignated live trees meeting Utilization Standards:

(a) Within 200 feet slope distance from centerline of roads constructed hereunder that are damaged by Purchaser’s construction to the extent that considerable deterioration or mortality is imminent and are designated by Forest Service for felling before the nearest road segment is Substantially Completed or

(b) That are damaged by Purchaser in logging and are subsequently Marked before Purchaser has completed skidding or yarding operations in the immediate area.

By agreement, such trees may be left without charge if their removal would cause undue damage or be grossly uneconomic.

BT2.132 Negligent or Willful Damage. Undesignated timber meeting Utilization Standards and unnecessarily damaged or negligently or willfully cut by Purchaser, if included by Contracting Officer.

BT2.133 Damage by Catastrophe. As provided under BT8.32, undesignated live and dead timber within Sale Area, meeting Utilization Standards, and affected by Catastrophic Damage. “Catastrophic Damage” as used hereunder is major change or damage to Included Timber on Sale Area, to Sale Area, to access to Sale Area, or a combination thereof:

(a) Caused by forces, or a combination of forces, beyond control of Purchaser, occurring within a 12-month period, including, but not limited to, wind, flood, earthquake, landslide, fire, forest pest epidemic, or other major natural phenomenon and

(b) Affecting the value of any trees or products meeting Utilization Standards, within Sale Area and estimated to total either:

- (i) More than half of the estimated timber quantity stated in AT2 or
- (ii) More than two hundred thousand cubic feet (2,000 CCF) or equivalent.

Catastrophic Damage does not include changes caused by forest pest epidemics or foreseeable deterioration if Included Timber was sold for salvage or pest control.

BT2.134 Minor Damage by Natural Causes. Undesignated trees within Sale Area and meeting Utilization Standards, in amounts less than specified in BT2.133, that become insect infested, windthrown, suffer serious damage, or die, as designated by agreement.

BT2.14 Unintentionally Cut Timber. Trees, within or immediately adjacent to Sale Area or to road construction or other authorized clearing outside Sale Area, not designated for cutting under BT2.3 but that are cut through mistake by Purchaser, when included by Contracting Officer.

BT2.15 Construction Timber. Trees to be used for construction under BT5.1.

BT2.16 Other Material. Species or products not listed in AT2, upon written approval of Contracting Officer under BT3.41.

BT2.2 Utilization and Removal of Included Timber. "Utilization Standards" for trees and minimum pieces are stated in AT2. To meet minimum tree specifications, trees must equal or exceed tree diameters listed in AT2 and contain at least one minimum piece. Except for timber required or authorized to be left, Purchaser shall fell and buck such trees and shall remove from Sale Area all pieces that:

- (a) Meet minimum piece standards in AT2 or
- (b) Do not meet such standards, but would have qualified as part of minimum pieces if bucking lengths were varied to include such material.

BT2.3 Timber Designations. Timber designated for cutting shall be confined to Sale Area, except as provided in BT2.131, BT2.14, BT2.15, BT2.32, and BT5.1. Sale Area Map indicates Payment Units, if any, where Marking under BT2.35 is to be done after timber sale advertisement, except for construction clearing under BT2.32, designation changes under BT2.37, and damaged timber.

The boundaries of Clearcutting Units, Overstory Removal Units, and Understory Removal Units were plainly Marked on ground before timber sale advertisement and are shown on Sale Area Map. Boundary trees shall not be cut. Such units where Measuring is to be completed after date of timber sale advertisement are also shown. The number of units and approximate acreage of timber designations are stated in AT3.

BT2.31 Clearcutting Units. All trees that meet Utilization Standards within "Clearcutting Units" are designated for cutting.

BT2.32 Construction Clearing. All timber is designated for cutting that is within the clearing limits of roads constructed hereunder or is in other authorized clearings. All dead or unstable live trees are designated for cutting that are sufficiently tall to reach Purchaser's landings or the roadbed of Specified and Temporary Roads when Marked in advance of felling of timber in the immediate vicinity. Pieces meeting Utilization Standards from such dead or unstable live trees shall be removed, unless there is agreement that to do so could damage the

road. Such designation may be revised as part of agreed changes in road location under BT5.2.

BT2.321 Specified Road Clearings. Timber within the clearing limits of Specified Roads is within separate Payment Units, as shown on Sale Area Map, and the quantities are in AT2. These Payment Units are subject to revision, as specified in BT2.37. The quantities of dead or unstable trees designated outside the clearing limits are not included in AT2.

BT2.322 Other Authorized Clearings. Timber within authorized clearings for Temporary Roads, landings, or other construction clearings is designated for cutting. Quantities of such timber are not included in AT2.

BT2.33 Overstory Removal Units. All trees within "Overstory Removal Units" are designated for cutting when they meet Utilization Standards and equal or exceed the diameter limits shown on Sale Area Map.

BT2.34 Understory Removal Units. All trees within "Understory Removal Units" are designated for cutting when they meet Utilization Standards and are smaller than the diameter limits shown on Sale Area Map.

BT2.35 Individual Trees. All trees to be cut, other than in the units described in BT2.31, BT2.32, BT2.33, and BT2.34, are Marked or designated by description. Trees are "Marked" when individually designated by Forest Service with paint marks above and below stump height.

Sale Area Map indicates areas plainly identified on the ground where leave trees are Marked to be left uncut.

BT2.36 Incompletely Measured Payment Units. Trees within incompletely Measured Payment Units shown on Sale Area Map at time of timber sale advertisement shall be designated in accordance with CT2.36. A representative sample of the timber to be designated has been Marked prior to timber sale advertisement in accordance with such rules. The approximate locations of the representative sample areas are shown on Sale Area Map.

BT2.37 Designation Changes. Within Sale Area, minor adjustments may be made in boundaries of cutting units or in the timber individually Marked for cutting when acceptable to Purchaser and Forest Service.

In event Contracting Officer accepts alternate facilities under BT5.26, Contracting Officer shall revise the affected Payment Units and adjust estimated quantities.

In the event Purchaser does not construct portions of Specified Roads, Payment Units involved shall be revised to eliminate the road portions not to be constructed. Parts of such areas within non-road-related Payment Units shall be added to such Payment Units and the timber thereon shall be designated by the methods provided for in the Payment Units. Estimated quantities for Payment Units so revised shall be adjusted as necessary.

BT2.4 Quantity Estimate. The estimated quantities of timber by species designated for cutting under BT2.3 and expected to be cut under Utilization Standards are listed in AT2. Estimated quantity in AT2 does not include the following:

- (a) Damaged timber under BT2.13;
- (b) Unintentionally cut timber under BT2.14;

(c) Construction timber under BT2.15 cut outside of Payment Units and removed from construction use for utilization by Purchaser;

(d) Timber within clearing limits of Temporary Roads or other authorized clearings and that is not designated under BT2.31, BT2.33, BT2.34, or BT2.35; or

(e) Dead or unstable live trees that are sufficiently tall to reach Purchaser's landings or the roadbed of Specified Roads under BT2.32.

Estimated quantities for such timber not included in AT2 shall be determined as stated in CT6.8.

If Sale Area Map shows Payment Units where Marking or Measuring is to be completed after date of timber sale advertisement, the objective of Forest Service shall be to designate for cutting in such Payment Units sufficient timber so that Sale Area shall yield the approximate estimated quantities by species or species groups stated in AT2. However, the estimated quantities stated in AT2 are not to be construed as guarantees or limitations of the timber quantities to be designated for cutting under the terms of this contract.

Quantity adjustments shall not be made under this Section after there is modification for Catastrophic Damage under BT8.32.

BT2.41 Adjustment for Quantity Deficit. If Sale Area Map shows Payment Units where Marking or Measuring is to be completed after the date of timber sale advertisement and if Contracting Officer determines that a deficit in the estimated quantity will cause the quantity designated to be less than 90 percent of the total estimate shown in AT2, Forest Service, upon request by Purchaser, shall designate additional timber within Sale Area. Such additional timber shall be limited to that estimated to be necessary to reach approximately the estimated quantities by species listed in AT2. Any such additional designation shall be consistent with land and resource management plans.

BT2.42 Adjustment for Excess Quantity. If Sale Area Map shows Payment Units where Marking or Measuring is to be completed after date of timber sale advertisement and if Contracting Officer determines that the quantity designated will be more than 120 percent of the total estimated quantity listed in AT2, Forest Service, upon request by Purchaser, shall make an adjustment in Marking or cutting unit boundaries with the objective of designating for cutting the approximate estimated quantities by species listed in AT2. Such adjustments in quantities shall be confined to (a) Marking adjustments on Sale Area and (b) reduction in area to be cut over. Such adjustments or reductions shall not conflict with the silvicultural treatment being applied on Sale Area and shall not materially change the average value by species of the timber designated for cutting. Such adjustments may be made notwithstanding the provisions of BT1.1 and BT2.3.

If the timber designated for cutting is not reduced by such adjustments to less than 120 percent of the total estimated quantity listed in AT2, Purchaser, after cutting 120 percent of the total estimated quantity listed in AT2, may elect to have Sale Area reduced to eliminate Payment Units where felling has not begun.

BT2.43 Adjustment for Quantity Errors. An estimated quantity shown in AT2 shall be revised by correcting identified errors made in determining estimated quantity that result in a change in total timber sale quantity of at least 10 percent or \$1,000 in value, whichever is less, when an incorrect estimated quantity is caused by computer malfunction or an error in calculations, area determination, or computer input.

No adjustments in quantity shall be made for variations in accuracy resulting from planned sampling and Measuring methods or judgments of timber quality or defect.

For payment purposes, corresponding revisions in quantity and total payment shall be shown in AT4c for each Payment Unit involved. Adjustment in rates will not be made. Adjustment in quantities shall not obligate Forest Service to designate additional quantities when the original quantity estimate is overstated.

BT3.0—RATES OF PAYMENT

BT3.1 Current Contract Rates. Included Timber that is Released for Cutting shall be paid for at Current Contract Rates determined under this Section. "Current Contract Rates" shall be (a) Flat Rates and (b) Tentative Rates adjusted by the escalation procedures in BT3.2. Flat Rates and Tentative Rates shall be those listed in AT4, unless superseded by rates redetermined under BT3.3 or established for Contract Term Extension.

Current Contract Rates, based on rates redetermined under BT3.3 or established under BT8.23, shall apply to all Payment Units from which removal of timber from Sale Area has not been completed on the effective date of the revised rates, except Current Contract Rates in effect at the time of Release for Cutting shall be applicable:

(a) On Payment Units for Specified Roads Released for Cutting on which clearing has begun and

(b) For not more than two other Payment Units from which removal from Sale Area has begun.

Notwithstanding the exceptions provided in this Section, rates redetermined under BT3.31, BT3.32, and BT3.33 shall apply to all Included Timber removed subsequent to the rate redetermination.

In event there are more than two Payment Units from which timber removal has not been completed on the effective date, the rates in effect at the time of Release for Cutting shall apply to the two units from which the greatest estimated proportions of Payment Unit quantities have been removed. Otherwise, in released Payment Units, redetermined rates or rates established for Contract Term Extension shall apply to the entire quantity shown in AT4c for those units. In addition, Required Deposits shall be made as listed in AT4 and CT5.32, or established under BT3.3 or BT8.23.

In the event Termination Date is adjusted under BT8.21 or BT8.212, Current Contract Rates shall be continued in the same manner as immediately prior to the adjustment period.

"Current Contract Value" is the sum of the products of Current Contract Rates and estimated remaining

quantities by species of Included Timber meeting Utilization Standards.

BT3.2 Escalation Procedure. Tentative Rates for those species and products listed in AT4a are subject to quarterly escalation in accordance with the following procedures: The calendar quarter index average for each price index described in AT5 is the arithmetic average of the three such monthly price indices preceding January 1, April 1, July 1, and October 1. The difference between calendar quarter index average and Base Index listed in AT4a shall be the basis for quarterly escalation. To arrive at Current Contract Rates for Payment Units Released for Cutting during the preceding calendar quarter, Tentative Rates for each species shall be reduced or increased by such difference, except when the calendar quarter index average is:

(a) Less than the Base Index, the reduction shall not result in a rate below Base Rate or

(b) Greater than the Base Index, the increase shall not exceed the difference between Tentative Rate and Base Rate.

In the event of Contract Term Extension, the escalation procedure will be used during the extension period, except that adjusted payment rates for any calendar quarter cannot be less than Tentative Rates, for each species and product group, established under BT8.23 for the extension period.

BT3.21 Unavailable Index. If an index described in AT5 is no longer available, Contracting Officer may replace that index. If Contracting Officer determines that a replacement index does not exist, Current Contract Rates for the remainder of the timber sale shall be a Flat Rate. Flat Rates will be Tentative Rates adjusted by the arithmetic average of the index described in AT5 for a 12-month period prior to its becoming unavailable using the quarterly adjustment procedure outlined in BT3.2. Contracting Officer will determine availability and a beginning point to average the index for Flat Rates. Such Flat Rates are subject to rate redetermination as provided elsewhere under this contract.

BT3.3 Rate Redetermination. Rates may be redetermined as set forth in this Section. Bid Premium Rates shall be added to all redetermined rates, except as provided in BT3.31, BT3.32, and BT3.33.

Rate redeterminations shall be made in accordance with the standard Forest Service methods in effect 45 days prior to rate redetermination. Such methods shall take into consideration factors that may affect timber value at rate redetermination date.

Redetermined rates shall not be less than Base Rates listed in AT4, except for reduction under BT3.31, BT3.32, or BT3.33. Required Deposits shall be redetermined. Redetermined Specified Road construction cost is subject to the limitations of BT5.26.

BT3.31 Rate Redetermination for Environmental Modification. In the event of a contract modification under BT8.33 or partial termination under BT8.34, Contracting Officer shall make an appraisal to determine for each species the difference between the appraised unit value of Included Timber remaining

immediately prior to the revision and the appraised unit value of Included Timber to be cut under the modification. The appraisal shall consider the estimated cost of any construction work listed in the Schedule of Items that was performed and abandoned.

Tentative Rates and Flat Rates in effect at the time of the revision will be adjusted by said differences to become Current Contract Rates. Accordingly, Base Rates shall be adjusted to correspond to the redetermined rates if redetermined rates are less than the original Base Rates, subject to a new Base Rate limitation of the cost of essential reforestation or 25 cents per hundred cubic feet or equivalent, whichever is larger. However, existing Base Indices shall not be changed under this Subsection.

Redetermined rates, or differences for rates subject to BT3.2, and Required Deposits shall be considered established under BT3.1 for Included Timber removed subsequent to the contract revision.

BT3.32 Rate Redetermination after Catastrophic Damage. In event of Catastrophic Damage and adjustment, if any, of Included Timber, Contracting Officer shall make an appraisal to determine for each species the catastrophe-caused difference between the appraised unit value of Included Timber remaining immediately prior to the catastrophe and the appraised unit value of existing and potential Included Timber immediately after the catastrophe. Included Timber is any that would not be eliminated under BT8.32. Potential Included Timber is any that would be added under BT8.32.

Tentative Rates and Flat Rates in effect at the time of catastrophe shall be adjusted by said differences to become the redetermined rates for the purpose of a contract modification under BT8.32. Accordingly, Base Rates shall be adjusted to correspond to the redetermined rates if redetermined rates are less than the original Base Rates, subject to new Base Rate limitations of 25 cents per hundred cubic feet or equivalent. However, existing Base Indices shall not be changed under this Subsection.

Upon agreement under BT8.32, redetermined rates and Required Deposits shall be considered established under BT3.1 for Included Timber removed subsequent to Catastrophic Damage.

At time of such appraisal, Specified Road construction cost shall include the estimated cost of any construction work listed in the Schedule of Items performed and abandoned.

BT3.33 Rate Redetermination for Market Change. In the event of delay or interruption, exceeding 90 days, under BT8.33, Contracting Officer shall make an appraisal to determine for each species the difference between the appraised unit value of Included Timber immediately prior to the delay or interruption and the appraised unit value of Included Timber immediately after the delay or interruption. The appraisal shall be done after any rate redetermination done pursuant to BT3.31, using remaining volumes.

Tentative Rates and Flat Rates in effect at the time of delay or interruption or established pursuant to BT3.31 will be reduced, if appraised rates declined during the delay or interruption, to become Current Contract Rates.

Increases in rates will not be considered. Accordingly, Base Rates shall be adjusted to correspond to the redetermined rates if redetermined rates are less than the original Base Rates, subject to a new Base Rate limitation of the cost of essential reforestation or 25 cents per hundred cubic feet or equivalent, whichever is larger. However, existing Base Indices shall not be changed under this Subsection.

Redetermined rates shall be considered established under BT3.1 for Included Timber removed subsequent to the delay or interruption.

BT3.34 Emergency Rate Redetermination.

Forest Service shall redetermine rates if, upon Purchaser's application, Forest Service determines that, because of changes in the timber market since the award date or the last rate redetermination under this provision, the Producer Price Index identified in AT17 has declined by 25 percent. Rates shall be redetermined under BT3.3 and shall be considered established under BT3.1 for Payment Units described therein at the time of Purchaser's application. This Subsection shall not apply during Contract Term Extension.

BT3.4 Other Payment Rates.

BT3.41 Material and Quantities Not in AT2.

Incidental amounts of products or portions of trees of species listed in AT2 that do not meet Utilization Standards may be removed without charge. Such material may be purposely removed in more than incidental amounts without charge upon written approval of Contracting Officer, and subject to agreement on deposits if needed for road maintenance and use.

Other species or products not listed in AT2 may be cut and removed upon written approval of Contracting Officer and subject to agreement on rates of payment and deposits if needed for road maintenance and use.

Timber for which the quantity is not included in the estimate listed in AT2, as described in BT2.4, shall be paid for at Current Contract Rates and Required Deposits.

BT3.42 Timber Cut Through Mistake. Undesignated timber meeting Utilization Standards, cut by Purchaser through mistake and included by Contracting Officer under BT2.14, shall be removed and paid for at Current Contract Rates and Required Deposits, unless such material is not listed in AT2. In such event, Contracting Officer, in accord with standard Forest Service methods, shall establish rates to be paid.

BT3.43 Undesignated Timber Damaged Without Negligence. Undesignated timber meeting Utilization Standards, damaged without negligence by Purchaser and designated by Forest Service under BT2.131, shall be cut, removed, and paid for at Current Contract Rates and Required Deposits.

BT3.44 Undesignated Timber Unnecessarily Damaged or Negligently or Willfully Cut. Undesignated timber meeting Utilization Standards and unnecessarily damaged or negligently or willfully cut by Purchaser, if included by Contracting Officer under BT2.132, shall be cut, removed, and paid for at Current Contract Rates and

Required Deposits that are in addition to liquidated damages under BT3.45.

If such timber is of a species or size not listed in AT2 or is of a quality different from designated timber, Contracting Officer shall establish payment rates in accord with standard Forest Service methods.

BT3.45 Liquidated Damages. Unnecessary damage to or negligent or willful cutting of undesignated timber, as described in BT3.44, on portions of Sale Area cut over under this contract is likely to cause substantial silvicultural or other damage to the National Forest. It will be difficult, if not impossible, to determine the amount of such damage. Therefore, Purchaser shall pay as fixed, agreed, and liquidated damages an amount equivalent to the amount payable at Current Contract Rates. If designated by Contracting Officer, Purchaser shall remove such damaged or cut timber and pay for it at Current Contract Rates.

BT4.0—PAYMENTS

BT4.1 Amount Payable for Timber. Except as provided in BT3.1, Current Contract Rates and Required Deposits in effect when a Payment Unit is Released for Cutting shall be applied to the timber quantities to determine the amount Purchaser shall pay. A "Payment Unit" is a portion of Sale Area established for payment purposes.

BT4.2 Timber Sale Account. "Timber Sale Account" is an account maintained by Forest Service of all Purchaser's deposits, credits, payment guarantees, and the charges for:

- (a) Timber at Current Contract Rates;
- (b) Slash disposal and road maintenance at Required Deposit rates;
- (c) Cooperative work at rates established by specific agreement under BT4.218; and
- (d) Other charges provided in this contract.

Cash deposits shall be recorded currently in such account.

Charges for Payment Units Released for Cutting shall be made when Forest Service prepares and furnishes to Purchaser periodic statements of quantity and value of such timber. Charges subject to escalation under BT3.2 shall be made initially on the basis stated in BT4.214 and shall be adjusted at the end of each calendar quarter, as provided in BT3.2.

Charges shall be made according to BT3.4 when trees are subsequently Marked or designated for cutting.

BT4.21 Cash Deposits. Within the limitations of this Subsection, Purchaser shall make cash deposits to meet Purchaser's obligations within 15 days of billing by Forest Service. Deposits shall be made to Forest Service, U.S.D.A., by mail or delivery to the address to be furnished by Forest Service. Forest Service shall explain the bill at the time it requests each deposit.

BT4.211 Downpayment. The downpayment amount shown in AT15 may not be applied toward any other payment required under the provisions of this contract, except damages determined pursuant to BT9.4, transferred to other timber sales, or refunded until stumpage value representing 25 percent of the total bid value of

the timber sale is shown on Timber Sale Account to have been cut, removed, and paid for, or if 36 CFR 223.49(e) is applicable, the estimated value remaining to be cut and removed, as shown on Timber Sale Account, is equal to or less than the amount of the downpayment. For lump sum timber sales, the downpayment may be applied to payment for release of the single payment unit.

If Forest Service makes a determination that this contract should not have been included under increased downpayment requirements (36 CFR 223.49(e)), the downpayment shall be revised and applied in accordance with 36 CFR 223.49(f).

BT4.212 Advance Deposits. Purchaser agrees to make cash deposits in advance of cutting to meet charges under BT4.2.

Forest Service billings for advance cash deposits shall be in such amounts that Timber Sale Account will maintain an unobligated balance that covers the applicable charges for Payment Units Released for Cutting and designated material not included in AT2 expected to be cut within the next 60 days. This advance cash deposit may be reduced to a smaller amount by the terms of BT4.211, BT4.213, BT4.215, and/or BT4.217. Except for amounts required pursuant to BT4.211, BT4.213, and BT4.217, Purchaser shall not be required to make advance deposits above those required under this Item.

When the credit balance in Timber Sale Account is exceeded by the charges for timber within Payment Units Released for Cutting and for the estimated quantity to be cut in 10 days of cutting designated material not included in AT2, Contracting Officer will suspend all or any part of Purchaser's Operations until payment or acceptable payment guarantee is received.

BT4.213 Periodic Payment Schedule. Purchaser shall make periodic payments for stumpage value, as shown in AT16.

In the event Purchaser has not paid the amount(s) stated in AT16 as stumpage for quantity removed by the periodic payment determination date(s), Forest Service shall issue a bill for collection for the difference between the required amount and payments made by Purchaser. If payment(s) fall due on a date other than a normal billing date, the payment date shall be extended to coincide with the next Timber Sale Account billing date.

The amount of the periodic payment(s) will be reduced if the payment(s) would result in Purchaser's credit balance for timber charges exceeding the Current Contract Value.

Only cash may be used for this purpose. No other form of payment is acceptable. Forest Service will apply the payments to subsequent charges on this contract under the terms of BT4.212.

Except for Contract Term Extensions under BT8.23, periodic payment determination date(s) that have not been reached shall be adjusted one day for each additional day of contract time granted.

BT4.214 Deposits for Charges Subject to Escalation. Deposits requested to cover estimated charges for timber subject to escalation under BT3.2 shall

be based upon Current Contract Rates and related deposits in effect during previous calendar quarter.

BT4.215 Deposits When Payment Guaranteed. To the extent payment guarantee is provided under BT4.3, requirements for advance cash deposits under BT4.212 shall be waived for the value of timber on Sale Area that has been Released for Cutting, but not removed, and for the estimated value of products removed from Sale Area for not more than a monthly billing period, subject to the provisions of BT4.4.

BT4.216 Blanket Cash Deposits. Purchaser may make cash deposits under a written agreement to cover charges made under this and other timber sale contracts within the same National Forest. Forest Service shall allocate such deposits to such timber sales. When there is to be no timber cutting hereunder for 30 days or more and payment of current charges has been made, the allocation to this timber sale shall be reallocated to other timber sales within the same National Forest at Purchaser's request. Purchaser shall not start cutting until allocation has again been made to this timber sale.

BT4.217 Extension Deposits. In the event of Contract Term Extension, Forest Service shall divide the difference between Current Contract Value as of the start of any Contract Term Extension and the credit balance of any deposit made pursuant to BT4.213 by the number of whole months remaining in Normal Operating Season(s) within the extension period to determine the amount of each "Extension Deposit."

Purchaser shall make the initial Extension Deposit prior to Forest Service executing the contract modification. In response to Forest Service billing under BT4.21, Purchaser shall make advance cash deposits. Such deposits shall at least equal each Extension Deposit required for each whole month remaining in Normal Operating Season(s) during the extension period. Extension Deposits shall be due by the last day of each month during Normal Operating Season whether or not any Payment Unit is to be released.

Due dates for Extension Deposits during the extension period may be delayed when Purchaser earns Contract Term Adjustment if Termination Date, as adjusted, results in one or more additional complete months within Normal Operating Season(s).

BT4.218 Cooperative Deposits. On a basis of cooperation or assistance (16 USC 572) and by a written agreement, Forest Service shall perform all or portions of the work that Purchaser is obligated to perform under this contract, as well as furnish other services in connection with activities under this contract. When Forest Service is to perform such work, Purchaser shall make one or more deposits to cover the estimated cost of the work. On request of Purchaser, Forest Service shall render monthly accounts, as may be specified in such agreement.

BT4.22 Temporary Reduction of Downpayment. When, under BT8.33, Contracting Officer orders a delay or interruption of Purchaser's Operations for more than 30 days when scheduled operations would be occurring but for the order, the downpayment amount

required shall be temporarily reduced upon the written request of Purchaser or at the discretion of the Contracting Officer. For the period of the delay or interruption, the downpayment on deposit may be reduced to \$1,000 or two (2) percent of the downpayment amount listed in AT15, whichever is larger.

Any downpayment amount temporarily reduced pursuant to this Subsection may be refunded or transferred at the request of Purchaser. However, if Purchaser has outstanding debt owed to the United States, Contracting Officer must apply the amount of downpayment that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act, as amended (31 USC 3701, *et seq.*).

Upon Purchaser's receipt of bill for collection and written notice from Contracting Officer that the basis for the delay or interruption no longer exists, Purchaser shall restore the downpayment to the full amount shown in AT15 within 15 days after the date the bill for collection is issued, subject to the provisions of BT4.4. Purchaser shall not resume contract operations until the downpayment amount is fully restored.

BT4.23 Refund of Excess Cash. If at any time the credit balance of Timber Sale Account exceeds the charges for timber within Payment Units Released for Cutting and for designated material not included in AT2 that Forest Service estimates will be cut within the next 60 days, any portion of such excess that is due to cash in the account shall be refunded, if requested by Purchaser, unless deposited under BT4.211, BT4.213, or BT4.217. If Purchaser plans no cutting within the next 60 days, Forest Service may refund the entire unencumbered cash balance, except as provided in this Subsection. However, Forest Service shall not reduce the credit balance below the total value of partially cut Payment Units and designated material not included in AT2 that is cut before operations cease. After a refund for a shutdown, deposits shall be made to meet the requirements of BT4.212 before additional timber may be cut.

BT4.24 Refund after Final Charges for Released Timber. Any cash deposit, in excess of that required to meet charges under BT4.2, shall be refunded or transferred within 15 days of Purchaser's request after final charges for Included Timber have been made, except for amounts estimated to be required under BT9.5.

BT4.3 Payment Guaranteed by Bond or Deposited Securities. To guarantee payment, Purchaser may furnish and maintain an acceptable surety bond or deposit in a Federal Depository negotiable securities of the United States. The securities shall be deposited through the Regional Fiscal Agent accompanied by a power of attorney and agreement authorizing the bond-approving officer to sell or collect such securities if payment is not made within 15 days of billing by Forest Service. The penal sum of such surety bond or the market value at time of deposit of such negotiable securities shall be the maximum amount of the payment guaranteed.

For payment purposes, penal sum of the surety bond or market value at time of deposit of negotiable securities

shall be in lieu of the performance bond furnished under BT9.1.

BT4.31 Blanket Bond. If Purchaser furnishes an acceptable bond, or deposits securities, in accordance with BT4.3, to guarantee payment for timber from this and other timber sales within the same National Forest, the amount of such bond or deposited securities shall be allocated to such timber sales by Forest Service. When there is to be no timber cutting hereunder for 30 days or more and payment of current charges has been made, the allocation to this timber sale shall be reallocated to other timber sales at Purchaser's request. Purchaser shall not start cutting hereunder until this timber sale receives an allocation that will meet the obligation for payment guarantee.

BT4.32 Letters of Credit for Payment Bond. Notwithstanding the provisions of BT4.3, Purchaser may use letters of credit in lieu of a surety bond for payment bond purposes when approved by Contracting Officer.

BT4.4 Payments Not Received. (a) Payments are due and payable on the date of issue indicated on the bill for collection. When a payment for timber cut and other charges is not received at the location designated by Forest Service by the date allowed in the bill for collection for receipt of payment, Contracting Officer will suspend all or any part of Purchaser's Operations until payment or acceptable payment guarantee is received. Other charges include, but are not limited to:

- (i) Slash disposal and road maintenance deposits;
- (ii) Cooperative work at rates established by specific agreement under BT4.218;
- (iii) Damages pursuant to BT9.4;
- (iv) Road use fees;
- (v) Restoration of downpayment pursuant to BT4.22;
- (vi) Periodic payments pursuant to BT4.213;
- (vii) Extension Deposits pursuant to BT4.217; and
- (viii) Other mandatory deposits.

(b) Failure to pay amounts due by the date allowed in the bill for collection for receipt of payment shall be considered a breach under BT9.3. The 30-day notice period prescribed therein shall begin to run as of the end of business on the date allowed for receipt of payments. If the performance or payment is guaranteed by surety bond, the surety will receive a copy of the written notification of breach. Demand will be made on the surety or other institution providing the guarantee or bond instrument for immediate payment 10 days after issuance of written notification of the breach.

(c) Pursuant to the Debt Collection Improvement Act of 1996, as amended, if payment is not received by Forest Service within 15 days after the date of issue indicated on the bill for collection:

- (i) Simple interest shall be assessed at the higher of the Current Value of Funds Rate or the Prompt Payment Rate as established by the Secretary of the Treasury. Interest will begin to accrue as of the date of issue indicated on the initial bill for collection.

(ii) Debtors will be assessed administrative charges, in addition to the delinquent amount due. Administrative charges are those additional costs incurred by the Government in processing, handling, and collecting delinquent debts.

(iii) A penalty charge of six (6) percent per annum will be assessed on any portion of a debt delinquent more than 90 days. This penalty charge is in addition to interest and administrative charges under paragraphs (c)(i) and (c)(ii). The penalty charge shall accrue from the date of issue indicated on the bill for collection and shall be assessed on all outstanding amounts, including interest and administrative costs assessed under paragraphs (c)(i) and (c)(ii).

(iv) Payments will be credited on the date received by the Federal Depository or Collection Officer designated on the bill for collection.

(d) Forest Service remedies for Purchaser's failure to make payment for timber cut and other charges when due, except for accrual of interest, suspension of all or any part of Purchaser's Operations, and administrative offset, shall be stayed for so long as:

(i) A bona fide dispute exists as to Purchaser's obligation to make such payment and

(ii) Purchaser files and prosecutes a timely Claim.

BT5.0—TRANSPORTATION FACILITIES

BT5.1 Authorization. Purchaser is authorized to construct and maintain roads, bridges, and other transportation facilities, as needed for harvesting Included Timber on National Forest and other lands where Forest Service has such authority. As used in this contract "construct" includes "reconstruct."

Location and construction of Specified Roads shall be in accordance with BT5.2. Unless otherwise provided herein, construction may be progressive during this contract. Maintenance shall be governed by BT5.3. The location and clearing widths of all Temporary Roads or facilities shall be agreed to in writing before construction is started. "Temporary Roads" are roads other than Specified Roads that are constructed by Purchaser for the purpose of harvesting Included Timber.

Purchaser is authorized to cut and use for construction without charge construction timber designated by agreement.

BT5.11 Requirements of Rights-of-Way. Purchaser's road construction and use of rights-of-way identified in attached list or CT5.11 shall be confined to rights-of-way and limited by the related easements and stipulations, if any, unless Purchaser makes other arrangements that will not infringe upon or adversely affect the grantee's rights. Easements or right-of-way documents are available in the offices of the Forest Supervisor and District Ranger.

BT5.12 Use of Roads by Purchaser. Except as provided herein, Purchaser is authorized to use existing National Forest system roads and Specified Roads listed in AT7, when Forest Service determines that such use

will not cause damage to the roads or National Forest resources.

If Purchaser's use of an existing temporary or National Forest system road, not listed in AT7, cannot be satisfactorily accommodated without reconstruction, Purchaser shall be authorized to use such road upon agreement as to the minimum reconstruction work that Purchaser shall perform before hauling. When appropriate, such road shall be included in AT7 as an alternate facility under BT5.26.

CT5.12 lists existing roads shown on Sale Area Map that for such reasons as limitations in structural capacity, safety, and protection of soil, water, and roads:

(a) Cannot be used for log hauling or

(b) May be used only under the restrictive limitations stated therein.

BT5.2 Specified Roads. "Specified Roads" are roads, including related transportation facilities and appurtenances, shown on Sale Area Map and listed in AT7. Purchaser shall construct Specified Roads used under this contract. Construction initiated by Purchaser on any such Specified Road shall be completed to an agreed terminus that meets Purchaser's needs and prevents unnecessary impact on National Forest resources. Construction to such terminus shall be in full accordance with Plans and specifications and the Schedule of Items identified in AT7 or specifications attached hereto, except for agreed adjustments needed to accommodate such terminus. The "Schedule of Items" is a list and description of construction items, quantities, units of measure, methods of measurement, unit price, and total amount. Forest Service shall revise the Schedule of Items to show the estimated cost for the portion constructed to the revised terminus as a separate segment.

A Temporary Road shall not be constructed substantially on the location for a Specified Road, except by agreement.

In event of agreed substitution or revision of construction design, specifications, or performance responsibility under BT5.212, BT5.25, BT5.26, or CT5.215, AT7 shall be modified. If Purchaser does not need a Specified Road or a portion of a Specified Road for harvesting Included Timber and the Specified Road is not constructed, the deletion of the road or road segment will be a mutually agreed Design Change and Timber Sale Account will be adjusted for the reduction in cost, as provided in BT5.25.

References in the contract to specifications, standards, or test methods adopted by the American Association of State Highway and Transportation Officials (AASHTO), American Society for Testing and Materials (ASTM), General Services Administration (GSA), or other recognized national technical associations shall mean specifications, standards, or test methods, including interim or tentative issues, that are in effect on the date of timber sale advertisement.

BT5.21 Engineering. Forest Service completed survey and design for Specified Roads prior to timber sale advertisement, unless otherwise shown in AT8 or

Purchaser survey and design are specified in AT7. On those roads for which Forest Service completes the design during the contract, the design quantities shall be used as the basis for revising estimated costs stated in the Schedule of Items and adjusting Timber Sale Account.

Forest Service engineering shall be completed according to the schedule in AT8. Should Forest Service be unable to perform the designated survey and design by the completion date or other agreed to time, upon written agreement, Purchaser shall assume responsibility for such work. In such event, Contracting Officer shall revise:

(a) AT7 to show Purchaser's performance responsibility.

(b) The Schedule of Items to include costs of survey and design, as provided under BT5.24, and adjust Timber Sale Account, as provided in BT5.25. Forest Service shall calculate such costs, using unit rates comparable with those used in the Schedule of Items.

Purchaser shall furnish a schedule to Forest Service of specific dates for the start of construction. The schedule of construction shall be submitted to Forest Service for approval within 60 days after contract award and prior to beginning work. Purchaser's construction schedule shall reflect Forest Service survey and design completion dates. Forest Service may agree to Purchaser's request for an alternate date for starting construction.

Purchaser shall perform survey, design, and construction staking of Specified Roads to be engineered by Purchaser in accordance with specifications attached hereto. Based upon the quantities developed by such design, as approved by Forest Service, Contracting Officer shall revise the estimated costs stated in the Schedule of Items and adjust Timber Sale Account. The methods of computing such revised costs shall be consistent with the methods that would have been used had the engineering been performed prior to timber sale advertisement.

BT5.211 Contract Plans. "Plans" are documents that show location, details, and dimensions of the work to be performed. On any of the contract Plans where a portion of the work is drawn out and the remainder is shown in outline, the parts drawn out shall apply to all other like portions of the work.

"Shop Drawings" include drawings, diagrams, layouts, schematics, descriptive literature, illustrations, lists or tables, performance and test data, and similar materials furnished by Purchaser to explain in detail specific portions of the work required by the contract. Purchaser shall submit a minimum of five (5) sets of required Shop Drawings to Forest Service, three (3) sets of which will be retained by Forest Service. Shop Drawings shall not exceed 24 inches by 36 inches in size. Approval or rejection and date will be noted or stamped on each set. Unless agreed otherwise, Forest Service shall approve or reject the Shop Drawings within 10 days of submission. Such approval of the Shop Drawings shall not be construed as a complete check, but will indicate

only that the general method of construction and detailing is satisfactory. If the Shop Drawings are rejected, Purchaser must make the noted revisions and resubmit the Shop Drawings.

A change in the amount of construction work that exceeds construction tolerances specified in the specifications identified in AT7 caused by a Forest Service error in construction staking shall be treated as a Design Change. When incompatible situations arise between Plans, specifications, and actual conditions on the ground, Purchaser shall make corrections pursuant to BT5.253.

BT5.212 Construction Staking. Purchaser shall avoid careless or negligent damage to construction stakes, flags, or marks. If such damage occurs, Purchaser shall be required to replace stakes necessary to construction. Purchaser's replacement staking shall be approved by Forest Service. Alternatively, upon Purchaser's request, Contracting Officer may agree to perform such work under BT4.218.

When AT7 shows that construction stakes are to be set by Forest Service after clearing, Purchaser shall submit to Forest Service a written schedule for clearing, construction staking, and construction that will provide Forest Service a reasonable period for setting construction stakes. Time for setting construction stakes may be modified by written agreement.

If Forest Service performs construction staking for Specified Roads, timing of such staking shall permit Purchaser's clearing and other construction activity to proceed without hindrance or delay, provided Purchaser's construction activity is reasonably consistent with needs identified in Purchaser's Operating Schedule or amendments thereto.

Should Forest Service be unable to perform construction staking in such reasonable period, upon written agreement, Purchaser shall assume the responsibility for construction staking for agreed upon portions of Specified Roads. In such event, Contracting Officer shall revise:

(a) AT7 to show Purchaser's performance responsibility.

(b) The Schedule of Items to include costs of construction staking, as provided under BT5.24, and adjust Timber Sale Account, as provided in BT5.25. Forest Service shall calculate such costs, using unit rates comparable with those used in the Schedule of Items.

BT5.22 Material Delivery. Within 60 days after award date, Purchaser shall provide Forest Service a written schedule showing the desired delivery dates of any material to be supplied by Forest Service. With reasonable notice, schedule may be amended by agreement. Forest Service agrees to make delivery within 15 days after the scheduled delivery dates that are at least 60 days after the schedule is submitted, unless prevented by causes beyond control of Forest Service.

If Purchaser does not provide Forest Service the written schedule within the period provided in this Subsection, Forest Service agrees to make delivery within 90 days after a late schedule is submitted, unless

prevented by causes beyond control of Forest Service. After delivery to and written receipt by Purchaser, Purchaser is responsible for installation of needed material and for any loss of or damage to such material due to Purchaser's negligence prior to installation or return of unused material to Forest Service.

At Purchaser's option, Forest Service deliveries shall be to Purchaser's storage area, as agreed, or to the nearest practicable point to the job site along existing roads. Unused material shall be returned to Forest Service at location of delivery, unless agreed otherwise.

BT5.23 Use of Partially Constructed Roads.

Unless Contracting Officer determines that there is justification under existing conditions and ground conditions permit hauling without undue damage, portions of Specified Roads shall be Substantially Completed prior to their use for hauling timber. When necessary to facilitate construction and protect bridges and roads from damage, timber felled in construction and timber logged directly to the road from areas immediately adjacent thereto may be hauled before road construction is Substantially Completed. Such hauling shall be confined to periods when abnormal soil erosion and damage to National Forest lands will not result.

"Substantially Completed" means:

(a) Completion of grading and installation of drainage structures so they will function effectively and

(b) Laying the specified depth of base course, if any.

No more than half of Included Timber to be hauled over such portions of road shall be hauled until the base course has been applied.

Unless agreed otherwise, specified reconstruction shall be completed on any portion of road prior to hauling on that portion.

BT5.24 Estimated Cost. Estimated costs by construction phases for Specified Roads listed in AT7 are stated by segments in the Schedule of Items. Such estimated costs are subject to adjustment under BT3.3, BT5.2, BT5.21, BT5.212, BT5.25, and BT5.26. Appropriately adjusted costs shall be made a part of a revised Schedule of Items and shown as adjustments to Timber Sale Account. The revised Schedule of Items shall supersede any prior Schedule of Items when it is dated and signed by Contracting Officer and a copy is furnished to Purchaser.

BT5.25 Construction Cost Adjustment.

Contracting Officer, as provided in BT5.21, BT5.212, BT5.251, BT5.252, and BT5.253, shall adjust Specified Road construction cost estimates in the Schedule of Items and show the adjustments as credits or debits to Timber Sale Account in the month when the road segment is accepted.

BT5.251 Variation in Quantities. (a) This Item applies only to differences between quantities shown in the Schedule of Items and measured quantities actually constructed and accepted that are not covered under BT5.252 or BT5.253. Only changes in quantities where other than contract quantity or lump sum is specified in the Schedule of Items are subject to this Item.

(b) Adjustments to the Specified Road construction cost for variation in quantities shall be computed at unit rates established in the Schedule of Items for units of work actually constructed and measured in accordance with specified method of measurement shown in the Schedule of Items and described in the specifications identified in AT7, except that:

(i) When quantity of authorized work performed or material furnished by Purchaser, under any item shown in the Schedule of Items and covered by this Item, is more than 115 percent of original quantity, use Current Unit Rates to calculate the adjustment for that portion of work above 115 percent of original quantity.

(ii) When quantity of authorized work performed or material furnished by Purchaser, under any item shown in the Schedule of Items and covered by this Item, is less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost for such work. Any revised estimate shall use the same procedures as those used in original estimates using rates comparable to those used in computing the most recent cost estimate for the timber sale. The revised cost estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

(c) "Current Unit Rates" are Forest Service estimates of the unit rates for doing the work at the time the adjustment is approved.

BT5.252 Physical Change. (a) Forest Service shall adjust the Specified Road construction cost if, prior to acceptance under BT6.36, a physical change, caused by a single event and not due to negligence of Purchaser, results in an increase or decrease in work and/or materials furnished by Purchaser involving additional estimated cost of:

(i) More than \$10,000 or

(ii) More than 10 percent of total Specified Road construction cost, whichever is less.

(b) Increases to the Specified Road construction cost shall include cumulative estimated costs of repairing damage from things such as slides, washouts, landslips, and fire. Plans and specifications shall be revised when necessary to meet new conditions. Quantities of work and/or materials determined from such revised Plans and specifications, together with estimated quantities of work and/or materials abandoned, shall be the basis for the revised Specified Road construction cost.

(c) Forest Service shall determine difference in quantities for portions of Specified Road affected by physical change by comparing most recent previous quantities with total of:

(i) Estimated quantities actually constructed prior to physical change, including work abandoned, and

(ii) Estimated quantities to be constructed following physical change.

(d) Forest Service shall calculate the amount of increase to the Specified Road construction cost by applying:

(i) Current Unit Rates to differences when quantities increase and

(ii) Unit rates comparable to those used in computing most recent cost estimate for the timber sale when quantities decrease.

(e) When quantity of authorized work to be performed or material furnished by Purchaser, under any item shown in the Schedule of Items, is reduced to less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost for such work and adjust the Specified Road construction cost. Any revised estimate shall use the same procedures as those used in the original estimates using rates comparable to those used in the most recent cost estimate for the timber sale. The revised estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

BT5.253 Design Change. (a) "Design Change" is a change in work and/or materials shown in the Schedule of Items and described in Plans or specifications that has been mutually agreed to in writing or ordered by Contracting Officer. Changes of a minor nature (such as adjustment in horizontal and vertical alignment, that do not exceed specified tolerance, necessary to maintain or balance earthwork quantities substantially as designed) and variation in quantities, as described in BT5.251, shall not be considered Design Changes.

(b) Additions, deletions, or changes in types or diameter of culverts shown in Plans and changes in designated water sources shown on Plans shall be considered Design Changes.

(c) Forest Service may, by written notice from Contracting Officer, order changes in work to be performed and/or materials to be furnished by Purchaser within general scope of the contract. Such work shall:

(i) Be due to differences between anticipated and actual field conditions,

(ii) Be necessary to construct Specified Roads to design standards, or

(iii) Be necessary to assure stability of Specified Roads.

(d) In addition, Contracting Officer may include work to protect resource values in ordered Design Changes. Such work must be related to construction of Specified Roads and be necessary to prevent damage to soil and water values immediately tributary to Specified Roads. Other Design Changes may be made by mutual written agreement.

(e) Forest Service shall revise Plans and specifications as necessary to meet new conditions. Quantities of work and/or materials determined from such revised Plans and specifications, together with quantities of work and/or materials abandoned, shall be the basis for adjusting the Specified Road construction cost.

(f) Forest Service shall determine the difference in quantities for the portion of Specified Road affected by Design Change by comparing the most recent previous quantities with the total of:

(i) Estimated quantities actually constructed prior to Design Change and

(ii) Estimated quantities to be constructed following Design Change.

(g) Calculate the amount of adjustment to the Specified Road construction cost by applying:

(i) Current Unit Rates to difference when quantities increase and

(ii) Unit rates comparable to those used in computing most recent cost estimates of the timber sale when quantities decrease.

(h) When quantity of authorized work to be performed or material furnished by Purchaser, under any item shown in the Schedule of Items, is reduced to less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost of such work and adjust the Specified Road construction cost. Any revised estimate shall use the same procedures as those used in original estimates using rates comparable to those used in the most recent cost estimate for the timber sale. The revised estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

BT5.26 Alternate Facilities. If under Purchaser's Operating Schedule, roads needed for the removal of Included Timber differ substantially from Specified Roads, other roads may be added to AT7. Contracting Officer shall assure that road routing, location, design, and needed easements will make such other roads acceptable as parts of the National Forest transportation facilities. Purchaser shall provide survey, design, and construction staking for such other roads.

Based on design quantities from such engineering, Forest Service shall estimate Specified Road construction costs of alternate facilities, using methods consistent with those used in the original computation of the Schedule of Items. If Specified Road construction costs for acceptable alternate facilities are less than the estimated costs of facilities listed in the original Schedule of Items that Purchaser does not construct, Timber Sale Account shall be adjusted by Forest Service to reflect the reduction in costs. In event of rate redetermination under BT3.3, such allowed costs shall be the redetermined estimated costs of facilities listed in the original Schedule of Items that Purchaser does not construct.

BT5.27 Temporary Credit for Unamortized Specified Road Construction Cost. When, under BT8.33, Contracting Officer orders a delay or interruption of Purchaser's Operations for more than 30 days when scheduled operations would be occurring but for the order, the Contracting Officer shall credit the unamortized cost of Specified Roads to Purchaser's Timber Sale Account, upon the written request of Purchaser or at the discretion of Contracting Officer. The amount credited to Purchaser shall be limited to stumpage paid above Base Rates.

Any Specified Road construction cost credited to Purchaser pursuant to this Subsection may be refunded or transferred at the request of Purchaser. However, if Purchaser has outstanding debt owed the United States,

Contracting Officer must apply the amount of credit that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act of 1996, as amended.

Upon written notice from Contracting Officer that the basis for the delay or interruption no longer exists, Purchaser shall pay for timber a per unit amount, in addition to Current Contract Rates, that is equal to the amount credited to Purchaser's Timber Sale Account divided by 80 percent of the estimated remaining volume of the contract, until the full amount credited to Purchaser has been returned.

BT5.3 Road Maintenance. Purchaser shall maintain roads, commensurate with Purchaser's use, in accordance with Road Maintenance Requirements in CT5.31 and the Road Maintenance Specifications. Performance of road maintenance work by Purchaser may be required prior to, during, or after each period of use. The timing of work accomplishment shall be based on Purchaser's Operating Schedule under BT6.31.

When two or more commercial users are simultaneously using the same road where Forest Service is not requiring maintenance deposits, the commercial users will develop maintenance responsibilities and arrangements for accomplishing the work. Forest Service must agree to this plan. If the commercial users cannot agree on maintenance responsibilities, Forest Service shall resolve the differences.

If Purchaser elects to use different roads than those listed in CT5.31, Forest Service shall determine Purchaser's commensurate share of road maintenance and revise road maintenance deposits in CT5.32.

If Forest Service cannot perform its full commensurate share of road maintenance, Forest Service shall make a cash payment to Purchaser for performance of such work.

Unless agreed in writing, prehaul maintenance shall be completed on any portion of road prior to hauling on that portion. Maintenance, as used in this contract, does not include road reconstruction or repairs of an extraordinary nature.

BT5.4 Use by Others. Forest Service shall have the right to use any road constructed by Purchaser under this contract for any and all purposes in connection with the protection and administration of the National Forest. Other parties, in connection with the logging of tributary National Forest timber, may use roads constructed by Purchaser hereunder when Contracting Officer determines that such use will not materially interfere with Purchaser's Operations. Third party use shall be contingent upon Contracting Officer determining, and third party agreeing to pay, a fair share of maintenance cost commensurate with such commercial use.

Unless otherwise provided in CT5.4, Forest Service shall authorize other uses of roads constructed by Purchaser hereunder only if:

(a) Contracting Officer makes appropriate arrangements to relieve Purchaser of related maintenance costs commensurate with such other uses and

(b) Such other uses will not materially interfere with Purchaser's Operations.

Where Purchaser reconstructs a road having established use, Purchaser's use during reconstruction and thereafter shall be such as to reasonably accommodate such established use. Contracting Officer shall ensure that other users do not materially interfere with Purchaser's right to use such reconstructed road.

BT6.0—OPERATIONS

BT6.1 Representatives. Unless otherwise agreed, Purchaser shall designate, in writing, a representative who is authorized to receive notices in regard to performance under this contract and take related action. In no case shall Purchaser designate any representative to this contract who is currently debarred, proposed for debarment, or suspended by the Federal Government. Purchaser's representative shall provide a copy of the contract to Purchaser's field supervisor and persons authorized to assume responsibilities in the field supervisor's absence. Prior to initial operations and after shutdowns of 10 days or more, Purchaser's representative shall notify Forest Service 2 days, excluding weekends and Federal holidays before any operations begin on Sale Area.

Purchaser's representative shall designate, in writing, a field supervisor, one of whose responsibilities shall be on-the-ground direction and supervision of Purchaser's Operations. The field supervisor shall be readily available to the area of operations when operations are in progress and shall be authorized to receive notices in regard to performance under this contract and take related action. The responsibilities of the field supervisor shall include the safeguarding of National Forest resources and performance within the terms of the contract. Purchaser representative will furnish Forest Service with names of persons authorized to assume responsibilities in field supervisor's absence. Such delegations may be made a part of Purchaser's annual Operating Schedule under BT6.31.

Unless Contracting Officer designates another Forest Service representative and notifies Purchaser in writing, the District Ranger is the representative of Forest Service. Forest Service representative shall:

(a) Receive notice in regard to performance under this contract,

(b) Take action in relation to this contract, and

(c) Be readily available to the area of construction and logging operations.

Contracting Officer or Forest Service representative shall designate other on-the-ground representatives in writing along with their specific contractual responsibilities and authority. Representatives with authority delegated in writing are the only Forest Service personnel authorized to provide notice or take related actions under the contract. Such delegation shall be made within 30 days of receipt of Purchaser's Plan of Operations.

BT6.11 Notices. Notices by either party as to action taken or to be taken by the other respecting this contract shall be made in writing to the other party's designated representative.

BT6.2 Improvements. Purchaser is authorized to construct on National Forest land, buildings, facilities, and other improvements needed to log Included Timber. Such construction shall be located where approved in writing by Forest Service and shall be constructed and used in a manner that will protect National Forest values.

Purchaser shall comply with the rules and regulations governing the operation of premises that are occupied and shall perform the contract in a manner that will not interrupt or interfere with the conduct of Forest Service business.

Forest Service shall grant written permission before any camp, quarry, borrow pit, storage, or service area, other than as shown on Plans, is opened or operated on National Forest land or administered lands. A camp is interpreted to include the campsite or trailer parking area of any employee, agent contractor, Subcontractor or their employees or agents working on the project for Purchaser. Such permission, if granted, shall be without charge to Purchaser.

BT6.21 Removal. Unless Forest Service authorizes continued use, Purchaser shall remove or dispose of all improvements when no longer needed. Should Purchaser fail to remove or dispose of improvements within 6 months after Termination Date, Forest Service may dispose of improvements at Purchaser's expense under BT9.5 or may, upon written notice to Purchaser, assume title to improvements in the name of the United States. In the latter event, Purchaser shall not be required to remove such improvements.

BT6.22 Protection of Improvements. So far as practicable, Purchaser shall protect Specified Roads and other improvements (such as roads, trails, telephone lines, ditches, and fences):

- (a) Existing in the operating area,
- (b) Determined to have a continuing need or use, and
- (c) Designated on Sale Area Map.

Purchaser shall keep roads and trails needed for fire protection or other purposes and designated on Sale Area Map reasonably free of equipment and products, slash, and debris resulting from Purchaser's Operations. Purchaser shall make timely restoration of any such improvements damaged by Purchaser's Operations and, when necessary because of such operations, shall move such improvements, as specified in CT6.22.

BT6.221 Protection of Improvements Not Owned by Forest Service. Forest Service will notify all utility companies, or other parties affected, and make arrangements for all necessary adjustments of the public utility fixtures, pipelines, and other appurtenances likely to be affected by Purchaser's Operations.

When Purchaser's Operations are adjacent to properties of railway, telephone, or power companies, or other property, work shall not begin until Purchaser has identified actions necessary to prevent damage.

Purchaser shall cooperate with the owners of any underground or overhead utility lines in their removal and/or rearrangement operations in order that these operations may progress in a reasonable manner, utility duplication

or rearrangement work may be reduced to a minimum, and services shall not be unnecessarily interrupted.

In the event of interruption to utility services because of accidental breakage or as a result of lines being exposed or unsupported, Purchaser shall promptly notify the proper authority and shall cooperate with that authority in the restoration of service until the service is restored.

When materials are to be hauled across the tracks of any railway, Forest Service will make arrangements with the railroad for the use of any existing crossing or for any new crossing required. Purchaser shall make arrangements for use of alternate crossings. All construction work to be performed by Purchaser on the railroad right-of-way shall not damage railroad company's property.

BT6.222 Protection of Property. In construction and reconstruction of Specified Roads, Purchaser shall not unnecessarily remove, deface, injure, or destroy trees, shrubs, or other natural features, unless specifically authorized. To the extent practicable, Purchaser shall confine operations to within the clearing limit or other areas designated in the contract and prevent the depositing of rocks, excavated materials, stumps, or other debris outside these limits.

Material that falls outside these limits shall be retrieved, disposed of, or incorporated in the work to the extent practicable and necessary to protect adjacent resource values, unless otherwise agreed.

BT6.23 Protection of Land Survey Monuments. Forest Service shall appropriately designate on the ground all known survey monuments, section corners, and other corner accessories. Forest Service shall post identifying signs on two sides of each known bearing tree.

Forest Service shall arrange protective or perpetuate action that does not cause unnecessary delay to Purchaser in authorized clearings, such as Clearcutting Units and road construction, and in other instances where damage to monuments, section corners, and other corner accessories is unavoidable.

Purchaser shall protect all known survey monuments, witness corners, reference monuments, and bearing trees against avoidable destruction, obliteration, or damage during Purchaser's Operations. If any known monuments, corners, or accessories are destroyed, obliterated, or damaged by Purchaser's Operations, Purchaser shall hire the appropriate county surveyor or a registered land surveyor to reestablish or restore at the same location the monuments, corners, or accessories. Such surveyors shall use procedures in accordance with the Bureau of Land Management "Manual of Instructions for the Survey of the Public Lands of the United States" for General Land Office surveys and in accordance with State law for others. Purchaser shall record such survey in appropriate county records.

BT6.24 Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources. (a) Areas, known by Forest Service prior to timber sale advertisement, needing special measures for the protection of plants, animals, cultural resources, and/or cave resources are shown on Sale Area Map

and/or identified on the ground, and shall be treated as follows:

(i) Unless agreed otherwise, wheeled or track laying equipment shall not be operated in areas identified as needing special measures except on roads, landings, tractor roads, or skid trails approved under BT5.1 or BT6.422. Purchaser may be required to backblade skid trails and other ground disturbed by Purchaser's Operations within such areas in lieu of cross ditching required under BT6.6. Additional special protection measures needed to protect such known areas are identified in CT6.24.

(ii) Unless agreed otherwise, trees will not be felled into areas identified as needing special measures.

(iii) Purchaser shall conduct operations in a manner that does not damage or disturb identified areas. In the event that protective measures identified by the Forest Service are for any reason inadequate, Contracting Officer may delay or interrupt Purchaser's operations, under this Contract, and/or modify this Contract pursuant to BT8.33.

(iv) Purchaser shall immediately notify the Forest Service if its operations disturb or damage any area identified as needing special protection, and shall immediately halt its operations in the vicinity of such area until the Forest Service authorizes continued operations. In the event that Purchaser's operations disturb or damage an area identified as needing special protection, then Purchaser shall reimburse the Forest Service for the full cost and expense of any evaluative and remedial measures undertaken by the Forest Service in connection with such disturbance or damage. Such payment shall not relieve Purchaser from civil or criminal liability under applicable law.

(b) Nothing contained in this Subsection shall establish, or be deemed to establish any express or implied warranty on the part of the Forest Service (i) that the Forest Service has identified all areas within the Sale Area requiring special protection, or (ii) that measures prescribed by the Forest Service for protection of such areas are adequate.

(c) Following sale advertisement, additional areas needing special measures for protection may be discovered or identified; protective measures may be revised or newly prescribed; and, additional species of plants and/or animals may be added to federal lists of protected species. In such event, Contracting Officer may delay or interrupt Purchaser's operations, under this Contract, and/or modify this Contract pursuant to BT8.33.

(d) Discovery, by either the Purchaser or the Forest Service, of additional areas, resources, species, or members of species needing special protection shall be promptly reported to the other party.

BT6.3 Control of Operations. Under this contract, "Purchaser's Operations" shall include activities of or use of equipment of Purchaser, Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents, acting in the course of their employment in operations hereunder on National Forest lands or within

Forest Service protection boundary (unless acting under the immediate supervision of Forest Service).

Purchaser's Operations shall be conducted in a workmanlike and orderly manner. The timing of required Forest Service designation of work on the ground and the performance of other Forest Service work shall not be such as to cause unnecessary delay to Purchaser.

"Release for Cutting" is written authorization to Purchaser to begin cutting in a Payment Unit. Upon Purchaser's request for release of a Payment Unit, Forest Service shall either:

(a) Give tentative approval and bill Purchaser as necessary under BT4.21 or

(b) Reject the request, stating reasons for rejection.

When payment or payment guarantee has been confirmed, Forest Service shall issue Release for Cutting within 10 days. Purchaser shall not cut timber in any Payment Unit until it is Released for Cutting.

BT6.31 Operating Schedule. Purchaser shall, before commencing operations, provide in writing an annual Operating Schedule of anticipated major activities and needs for logging Included Timber, such as logging, road maintenance, and construction, including construction staking under BT5.212 and material delivery under BT5.22. Upon reasonable notice to Forest Service, such schedule shall be subject to modifications necessitated by weather, markets, or other unpredictable circumstances.

Subject to BT6.6 and when the requirements of BT6.66 are met, Purchaser's Operations may be conducted outside Normal Operating Season. "Normal Operating Season" is the period(s) beginning and ending on the dates stated in AT13 of any year.

BT6.311 Plan of Operations. For timber sales with 2 or more years between award date and Termination Date, within 60 days of final award of contract, Purchaser shall furnish Forest Service a written general Plan of Operations that shall be in addition to the annual Operating Schedule required under BT6.31. The Plan of Operations shall set forth planned periods for and methods of road construction, timber harvesting, and completion of slash disposal, erosion control measures, and other contractual requirements. Forest Service written approval of the Plan of Operations is prerequisite to commencement of Purchaser's Operations. Purchaser may revise this Plan of Operations when necessitated by weather, markets, or other unpredictable circumstances, subject to approval of Contracting Officer. In the event of delays beyond the control of Purchaser that qualify for Contract Term Adjustment, the Plan of Operations shall be adjusted by mutual agreement to accommodate the adjusted contract period.

BT6.312 Plan of Operations for Road Construction. Annually, prior to start of construction, Purchaser shall submit a supplement to the Plan of Operations that shall include a schedule of proposed progress and a description of planned measures to be taken to provide erosion control for work in progress, including special measures to be taken on any segments of construction not Substantially Completed prior to periods of seasonal precipitation or runoff. Purchaser shall submit a

revised schedule when Purchaser proposes a significant deviation from the progress schedule.

Prior to beginning construction on any portion of Specified Roads identified as sensitive on Plans, Purchaser and Forest Service shall agree on proposed method of construction.

BT6.32 Protection of Residual Trees. Purchaser's Operations shall not unnecessarily damage young growth or other trees to be reserved.

BT6.33 Safety. Purchaser's Operations shall facilitate Forest Service's safe and practical inspection of Purchaser's Operations and conduct of other official duties on Sale Area. Purchaser has all responsibility for compliance with safety requirements for Purchaser's employees.

In the event that Contracting Officer identifies a conflict between the requirements of this contract or agreed upon methods of proceeding hereunder and State or Federal safety requirements, the contract shall be modified and Purchaser may request an adjustment in Current Contract Rates to compensate for the changed conditions.

Unless otherwise agreed in writing, when Purchaser's Operations are in progress adjacent to or on Forest Service controlled roads and trails open to public travel, Purchaser shall furnish, install, and maintain all temporary traffic controls that provide the user with adequate warning of hazardous or potentially hazardous conditions associated with Purchaser's Operations. Purchaser and Forest Service shall agree to a specific Traffic Control Plan for each individual project prior to commencing operations. Devices shall be appropriate to current conditions and shall be covered or removed when not needed. Except as otherwise agreed, flagmen and devices shall be as specified in the "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD) and as shown on Plans, Sale Area Map, Traffic Control Plan, or in specifications attached hereto.

BT6.34 Sanitation and Servicing. Purchaser shall take all reasonable precautions to prevent pollution of air, soil, and water by Purchaser's Operations. If facilities for employees are established on Sale Area, they shall be operated in a sanitary manner. In the event that Purchaser's Operations or servicing of equipment result in pollution to soil or water, Purchaser shall conduct cleanup and restoration of the polluted site to the satisfaction of Forest Service.

Purchaser shall maintain all equipment operating on Sale Area in good repair and free of abnormal leakage of lubricants, fuel, coolants, and hydraulic fluid. Purchaser shall not service tractors, trucks, or other equipment on National Forest lands where servicing is likely to result in pollution to soil or water. Purchaser shall furnish oil-absorbing mats for use under all stationary equipment or equipment being serviced to prevent leaking or spilled petroleum-based products from contaminating soil and water resources. Purchaser shall remove from National Forest lands all contaminated soil, vegetation, debris, vehicle oil filters (drained of free-flowing oil), batteries, oily

bags, and waste oil resulting from use, servicing, repair, or abandonment of equipment.

BT6.341 Prevention of Oil Spills. If Purchaser maintains storage facilities for oil or oil products on Sale Area, Purchaser shall take appropriate preventive measures to ensure that any spill of such oil or oil products does not enter any stream or other waters of the United States or any of the individual States.

If the total oil or oil products storage exceeds 1,320 gallons in containers of 55 gallons or greater, Purchaser shall prepare a Spill Prevention Control and Countermeasures Plan. Such plan shall meet applicable EPA requirements (40 CFR 112), including certification by a registered professional engineer.

Purchaser shall notify Contracting Officer and appropriate agencies of all reportable (40 CFR 110) spills of oil or oil products on or in the vicinity of Sale Area that are caused by Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents directly or indirectly, as a result of Purchaser's Operations. Purchaser will take whatever initial action may be safely accomplished to contain all spills.

BT6.342 Hazardous Substances. Purchaser shall notify the National Response Center and Contracting Officer of all releases of reportable quantities of hazardous substances on or in the vicinity of Sale Area that are caused by Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents, directly or indirectly, as a result of Purchaser's Operations, in accordance with 40 CFR 302.

BT6.35 Equipment Cleaning. (a) Areas, known by Forest Service prior to timber sale advertisement, that are infested with invasive species of concern are shown on Sale Area Map. A current list of invasive species of concern and a map showing the extent of known infestations is available at the Forest Supervisor's Office. For purposes of this provision, "Off-Road Equipment" includes all logging and construction machinery, except for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars, and similar vehicles.

(b) Purchaser shall adhere to the following requirements with regard to cleaning "Off-Road Equipment":

(i) Prior to moving Off-Road Equipment onto the Sale Area, Purchaser shall identify the location of the equipment's most recent operation. Purchaser shall not move any Off-Road Equipment that last operated in an area infested with one or more invasive species of concern onto Sale Area without having cleaned such equipment of seeds, soil, vegetative matter, and other debris that could contain or hold seeds, and having notified Forest Service, as provided in (iii). If the location of prior operation cannot be identified, then Purchaser shall assume that the location is infested with invasive species of concern.

(ii) Prior to moving Off-Road Equipment from a cutting unit that is shown on Sale Area Map to be infested with invasive species of concern to, or through any other area that is shown as being free of invasive species of

concern, or infested with a different invasive species, Purchaser shall clean such equipment of seeds, soil, vegetative matter, and other debris that could contain or hold seeds, and shall notify the Forest Service, as provided in (iii).

(iii) Prior to moving any Off-Road Equipment subject to the cleaning requirements set forth above, Purchaser shall advise Forest Service of its cleaning measures and make the equipment available for inspection. Forest Service shall have 2 days, excluding weekends and Federal holidays, to inspect equipment after it has been made available. After satisfactory inspection or after such 2 day period, Purchaser may move the equipment as planned. Equipment shall be considered clean when a visual inspection does not disclose seeds, soil, vegetative matter, and other debris that could contain or hold seeds. Purchaser shall not be required to disassemble equipment unless so directed by the Forest Service after inspection.

(iv) If Purchaser desires to clean Off-Road Equipment on National Forest land, such as at the end of a project or prior to moving to, or through an area that is free of invasive species of concern, Purchaser shall obtain prior approval from Contracting Officer as to the location for such cleaning and measures, if any, for controlling impacts.

(v) Contracting Officer may order delay, interruption, or modification of this Contract pursuant to BT8.33.

(c) Nothing contained in this Subsection shall be interpreted as creating any warranty on the part of the Forest Service that all locations of invasive species of concern have been described herein, elsewhere in this Contract, or designated on the ground. Following sale advertisement, additional locations may be described or designated, and other species may be added to the list of invasive species of concern. In such event, Contracting Officer may order delay, interruption, or modification of this Contract pursuant to BT8.33.

(d) The parties shall promptly communicate with one another with respect to description or designation of additional locations; discovery of locations of new species or new infestation; and, addition of species to the list of invasive species of concern.

BT6.36 Acceptance of Work. Upon Purchaser's written request and assurance that work has been completed, Forest Service shall perform an inspection within 5 days, excluding weekends and Federal holidays, so as not to delay unnecessarily the progress of Purchaser's Operations. Such a request may be for acceptance of:

(a) Any reasonable portion of Specified Road listed in the Schedule of Items;

(b) Specific requirements on a Payment Unit (such as logging, slash disposal, erosion control, or snag felling); or

(c) All contract requirements on a Payment Unit.

Forest Service may perform such inspections without request from Purchaser.

Within 2 days of inspection, excluding weekends and Federal holidays, Forest Service shall furnish Purchaser

with written notice either of acceptance or of work remaining to be done.

In the event that Forest Service is unable to make such inspection within 5 days of Purchaser's request, Purchaser shall be notified in writing of necessity for postponement and time when inspection can be made. The same final approval procedure shall be used at the end of Purchaser's construction period on any completed portion of road.

When all contractual work of Purchaser has been accepted for any Payment Unit or cutting unit identified on Sale Area Map, Payment Unit or cutting unit shall be eliminated from Sale Area on written notice of either party to this contract.

BT6.361 Acceptance of Specified Roads.

Specified Road work may be accepted subject to completion of clearing work that does not affect the road structure when completion is delayed for reasons beyond control of Purchaser, such as adverse weather.

Specified Road work may be accepted subject to completion of planting and seeding for soil stabilization when completion is delayed for reasons beyond control of Purchaser, such as seasonal limitations. Purchaser shall complete planting or seeding on such road during the next suitable planting season.

Specified Road work may be conditionally accepted prior to the application of dust palliatives when application is not necessary to prevent dusting of the road surface due to climatic conditions. Purchaser shall apply dust palliative on such roads prior to use during periods when dusting may occur.

Prior to request for final inspection, Specified Road work, roadways, borrow pits, and quarries, occupied and no longer needed by Purchaser in connection with Purchaser's Operations, shall be cleared of all rubbish, excess materials, and temporary structures.

BT6.4 Conduct of Logging. Unless otherwise specifically provided herein, Purchaser shall fell trees designated for cutting and shall remove the portions that meet Utilization Standards, as provided in BT2.2, prior to acceptance of Payment Unit for completion of logging under BT6.36. Forest Service may make exceptions for occasional trees inadvertently not cut or trees or pieces not removed for good reason, including possible damage to forest resources or gross economic impracticability at the time of removal of other timber. Logging shall be conducted in accordance with the following, unless CT6.4 provisions set forth requirements to meet special or unusual logging conditions:

BT6.41 Felling and Bucking. Felling shall be done to minimize breakage of Included Timber and damage to residual timber. Unless agreed otherwise, felling shall be done by saws or shears. Bucking shall be done to permit removal of all minimum pieces set forth in AT2. Purchaser may buck out cull material when necessary to produce pieces meeting Utilization Standards. Such bucked out material shall contain a minimum amount of sound wood, not in excess of the net Measure in percentage of gross Measure, or based on the merchantability factor, whichever is stated in AT2. If necessary to assess

extent of defect, Purchaser shall make sample saw cuts or wedges.

BT6.411 Felling in Clearings. Insofar as ground conditions, tree lean, and shape of clearings permit, trees shall be felled so that their tops do not extend outside Clearcutting Units, construction clearings, and areas of regeneration cutting.

BT6.412 Stump Heights. Stumps shall not exceed, on the side adjacent to the highest ground, the maximum heights set forth in AT6, except that occasional stumps of greater heights are acceptable when Purchaser determines that they are necessary for safe and efficient conduct of logging. Unless otherwise agreed, Purchaser shall re-cut high stumps so they will not exceed heights specified in AT6 and shall dispose of severed portions in the same manner as other logging debris. The stump heights shown in AT6 were selected with the objective of maximum reasonable utilization of the timber, unless Sale Area Map shows special areas where stump heights are lower for aesthetic, land treatment, or silvicultural reasons.

BT6.413 Limbing. When Forest Service determines it is necessary to minimize damage to the residual stand during skidding, Purchaser shall cut exposed limbs from products prior to skidding. Purchaser may leave uncut those limbs that cannot be cut with reasonable safety.

BT6.42 Skidding and Yarding. Methods of skidding or yarding specified for particular areas, if any, are indicated on Sale Area Map. Outside Clearcutting Units and construction clearings, insofar as ground conditions permit, products shall not be skidded against reserve trees or groups of reproduction and tractors shall be equipped with a winch to facilitate skidding.

BT6.421 Rigging. Insofar as practicable, needed rigging shall be slung on stumps or trees designated for cutting.

BT6.422 Landings and Skid Trails. Location of all landings, tractor roads, and skid trails shall be agreed upon prior to their construction. The cleared or excavated size of landings shall not exceed that needed for efficient skidding and loading operations.

BT6.423 Skidding on Roads. Products may be skidded on permanent roads authorized for hauling under BT5.12 only by prior written agreement.

BT6.424 Arches and Dozer Blades. Unless otherwise specified in CT6.424, skidding tractors equipped with pull-type arches or dozer blades wider than tractor width or C-frame width, whichever is greater, shall not be used in residual timber outside Clearcutting Units and other authorized clearings, except on constructed tractor roads or landings, unless there is written agreement that residual timber will not be damaged materially by such use.

BT6.5 Streamcourse Protection. "Streamcourses" that are subject to provisions of this Section are shown on Sale Area Map. Unless otherwise agreed, the following measures shall be observed to protect Streamcourses:

(a) Purchaser's Operations shall be conducted to prevent debris from entering Streamcourses, except as

may be authorized under paragraph (d). In event Purchaser causes debris to enter Streamcourses in amounts that may adversely affect the natural flow of the stream, water quality, or fishery resource, Purchaser shall remove such debris as soon as practicable, but not to exceed 2 days, and in an agreed manner that will cause the least disturbance to Streamcourses.

(b) Culverts or bridges shall be required on Temporary Roads at all points where it is necessary to cross Streamcourses. Such facilities shall be of sufficient size and design and installed in a manner to provide unobstructed flow of water and to minimize damage to Streamcourses. Trees or products shall not be otherwise hauled or yarded across Streamcourses unless fully suspended.

(c) Wheeled or track-laying equipment shall not be operated in Streamcourses, except at crossings designated by Forest Service or as essential to construction or removal of culverts and bridges.

(d) Flow in Streamcourses may be temporarily diverted only if such diversion is necessary for Purchaser's planned construction and Forest Service gives written authorization. Such flow shall be restored to the natural course as soon as practicable and, in any event, prior to a major storm runoff period or runoff season.

BT6.6 Erosion Prevention and Control. Purchaser's Operations shall be conducted reasonably to minimize soil erosion. Equipment shall not be operated when ground conditions are such that excessive damage will result. Purchaser shall adjust the kinds and intensity of erosion control work done to ground and weather conditions and the need for controlling runoff. Erosion control work shall be kept current immediately preceding expected seasonal periods of precipitation or runoff.

If Purchaser fails to do seasonal erosion control work prior to any seasonal period of precipitation or runoff, Forest Service may temporarily assume responsibility for the work and any unencumbered deposits hereunder may be used by Forest Service to do the work. If needed for such work, Purchaser shall make additional deposits on request by Forest Service. Any money deposited or used for this purpose shall be treated as cooperative deposits under BT4.218.

BT6.61 Meadow Protection. Reasonable care shall be taken to avoid damage to the cover, soil, and water in meadows shown on Sale Area Map. Vehicular or skidding equipment shall not be used on meadows, except where roads, landings, and tractor roads are approved under BT5.1 or BT6.422. Unless otherwise agreed, trees felled into meadows shall be removed by endlining. Resulting logging slash shall be removed where necessary to protect cover, soil, and water.

BT6.62 Wetlands Protection. Wetlands requiring protection under Executive Order 11990 are shown on Sale Area Map. Vehicular or skidding equipment shall not be used in such wetlands, except where roads, landings, and tractor roads are approved under BT5.1 or BT6.422. Additional measures needed to protect such areas are provided in CT6.62.

BT6.63 Temporary Roads. As necessary to attain stabilization of roadbed and fill slopes of Temporary Roads, Purchaser shall employ such measures as out-sloping, drainage dips, and water-spreading ditches.

After a Temporary Road has served Purchaser's purpose, Purchaser shall give notice to Forest Service and shall remove bridges and culverts, eliminate ditches, out-slope roadbed, remove ruts and berms, effectively block the road to normal vehicular traffic where feasible under existing terrain conditions, and build cross ditches and water bars, as staked or otherwise marked on the ground by Forest Service. When bridges and culverts are removed, associated fills shall also be removed to the extent necessary to permit normal maximum flow of water.

BT6.631 Temporary Roads to Remain Open. To maintain short term access to portions of Sale Area for post-sale treatments and other purposes after a Temporary Road has served Purchaser's purpose, pursuant to BT6.63, Purchaser agrees, that on Temporary Roads designated on Sale Area Map as "Remain Open," to construct cross ditches and water bars, as designated, staked, or otherwise directed by Forest Service, that can be traversed by a normal two-wheel drive pickup truck. On "Remain Open" Temporary Roads, all bridges and culverts shall remain in place and ditches shall not be eliminated. All drainage structures shall be left in functional condition.

BT6.64 Landings. After landings have served Purchaser's purpose, Purchaser shall ditch and slope them to permit water to drain or spread. Unless agreed otherwise, cut and fill banks around landings shall be sloped to remove overhangs and otherwise minimize erosion.

BT6.65 Skid Trails and Fire Lines. Purchaser shall construct cross ditches and water-spreading ditches on tractor roads and skid trails, where staked or otherwise marked on the ground by Forest Service. Forest Service shall designate cross ditching on Purchaser-built fire lines prior to or during construction. By agreement, Purchaser may use other comparable erosion control measures, such as backblading skid trails, in lieu of cross ditching.

BT6.66 Current Operating Areas. Where logging or road construction is in progress but not completed, unless agreed otherwise, Purchaser shall, before operations cease annually, remove all temporary log culverts and construct temporary cross drains, drainage ditches, dips, berms, culverts, or other facilities needed to control erosion.

Such protection shall be provided, prior to end of a Normal Operating Season, for all disturbed, unprotected ground that is not to be disturbed further prior to end of operations each year, including roads and associated fills, tractor roads, skid trails, and fire lines. When weather permits operations after Normal Operating Season, Purchaser shall keep such work on any additional disturbed areas as up to date as practicable.

BT6.67 Erosion Control Structure Maintenance. During the period of this contract, Purchaser shall provide maintenance of soil erosion control structures constructed by Purchaser until they become stabilized,

but not for more than 1 year after their construction. Contracting Officer may agree to perform such structure maintenance under BT4.218, if requested by Purchaser, subject to agreement on rates. Purchaser shall not be responsible for repair of such structures damaged by other National Forest users whose activities are not a part of Purchaser's Operations.

BT6.7 Slash Disposal. Purchaser's timing of product removal and preparatory work shall not unnecessarily delay slash disposal. Specific slash disposal measures to be employed by Purchaser are stated in CT6.7 and are in addition to Required Deposits for slash disposal.

BT6.8 Measuring. "Measuring" is the estimation of timber quantities using certain dimensions and applicable volume tables or formulae to determine the contents of trees or stands in a standard manner. Sampling may be on an individual tree or area basis. Examples of standard procedures are tree measurement, sample tree measurement, and area estimate. The quantity of timber designated or to be designated for cutting has been or shall be Measured, as specified in CT6.8.

BT6.81 Product Identification. Before removal from Sale Area, unless Contracting Officer determines that circumstances warrant a written waiver or adjustment, Purchaser shall:

(a) Hammer brand all products that are eight (8) feet or more in length and one-third (1/3) or more sound, on each end that is seven (7) inches or more in diameter.

(b) West of the 100th meridian, paint with a spot of highway-yellow paint all domestic processing products that are eight (8) feet or more in length and one-third (1/3) or more sound, on each end that is seven (7) inches or more in diameter. Each paint spot must be not less than three (3) square inches in size.

Contracting Officer shall assign brands and, if Sale Area is within a State that maintains a log brand register, brands shall be registered with the State. Purchaser shall use assigned brand exclusively on logs from this sale until Contracting Officer releases brand. Purchaser will furnish and apply highway-yellow paint of a lasting quality (oil-base or equivalent).

All hammer brands and/or highway-yellow paint must remain on logs until they are domestically processed. Purchaser shall replace identifying marks if they are lost, removed, or become unreadable. Purchaser may remanufacture products into different log lengths. Except for logs remanufactured as part of the mill in-feed process immediately before processing, remanufactured products must be rebranded with the assigned timber sale brand and repainted with highway-yellow paint, unless otherwise agreed to in writing by Contracting Officer. For such remanufactured products, Contracting Officer may approve use of a brand to be used exclusively as a catch brand, in lieu of the assigned timber sale brand.

BT6.9 Records. Upon request, Purchaser shall provide access to appropriate annual records in Purchaser's books and accounts to enable Forest Service to obtain and analyze accurate operating costs and selling price data for appropriate use in appraising Federal timber. Operating cost and selling price data shall include that

applicable for appraising timber obtained from Federal sources in or processed in the Region. Purchaser shall provide access to such data on behalf of subsidiary entities owned or controlled by Purchaser to the extent they participate in harvesting, manufacturing, or marketing timber into products recognized in National Forest timber appraisals in the area. To a like extent, Purchaser shall request in writing Purchaser's contractors and Subcontractors to make such data available to Forest Service.

Information so obtained shall be treated as confidential, as provided in regulations issued by the Secretary of Agriculture (7 CFR 1.12), and shall be available for review by parties from whom such data are obtained.

BT7.0—FIRE PRECAUTIONS AND CONTROL

BT7.1 Plans. Prior to initiating Purchaser's Operations during Fire Precautionary Period, Purchaser shall file with Forest Service a Fire Prevention and Control Plan providing for the prevention and control of fires on Sale Area and other areas of Purchaser's Operations. Such plan shall include a detailed list of personnel and equipment at Purchaser's disposal for implementing the plan. This requirement may be met by preparing a single plan for more than one timber sale.

BT7.2 Fire Precautions. Specific fire precautionary measures listed in CT7.2 shall be applicable during Purchaser's Operations in "Fire Precautionary Period" described in AT9. Contracting Officer may change the dates of Fire Precautionary Period by advance written notice, if justified by unusual weather or other conditions. Required tools and equipment shall be kept in serviceable condition and immediately available for fire fighting at all times during Purchaser's Operations in Fire Precautionary Period.

BT7.21 Substitute Precautions. Forest Service may authorize substitute measures or equipment, or waive specific requirements by written notice, if substitute measures or equipment will afford equal protection or some of the required measures and equipment are unnecessary.

BT7.22 Emergency Precautions. Forest Service may require the necessary shutting down of equipment on portions of Purchaser's Operations, as specified by the emergency fire precautions schedule of CT7.22. Under such conditions, after Purchaser ceases active operations, Purchaser shall release for hire by Forest Service, if needed, Purchaser's shutdown equipment for fire standby on Sale Area or other areas of Purchaser's Operations and personnel for fire standby or fire patrol, when such personnel and equipment are not needed by Purchaser for other fire fighting or protection from fire. Equipment shall be paid for at fire fighting equipment rates common in the area or at prior agreed rates and, if Purchaser requests, shall be operated only by personnel approved by Purchaser. Personnel so hired shall be subject to direction and control by Forest Service and shall be paid by Forest Service at fire fighting rates common in the area or at prior agreed rates.

BT7.3 Fire Control. Purchaser shall, both independently and in cooperation with Forest Service, take all reasonable and practicable action to prevent and suppress

fires resulting from Purchaser's Operations and to suppress any forest fire on Sale Area. Purchaser's independent initial fire suppression action on such fires shall be immediate and shall include the use of all necessary personnel and equipment at Purchaser's disposal on Sale Area or within the distance of Sale Area stated in AT10.

BT7.31 Purchaser's Reinforcement Obligations. Whenever an Operations Fire or Negligent Fire, whether on or off Sale Area, or any other forest fire on Sale Area, has not been suppressed by initial action and appreciable reinforcement strength is required, Forest Service may require further actions by Purchaser until such fire is controlled and mopped up to a point of safety. Such actions may include any or all of the following as necessary to fight such fire:

BT7.311 Suspend Operations. To suspend any or all of Purchaser's Operations.

BT7.312 Personnel. To release for employment by Forest Service any or all of Purchaser's personnel engaged in Purchaser's Operations or timber processing within the distance of Sale Area stated in AT10. Any organized crew so hired shall include Purchaser's supervisor, if any. Personnel so employed shall be paid at Forest Service standard emergency fire fighting rates.

BT7.313 Equipment. To make available for Forest Service rental at fire fighting equipment rates common in the area or at prior agreed rates any or all of Purchaser's equipment suitable for fire fighting and currently engaged in Purchaser's Operations within the distance of Sale Area stated in AT10. Equipment shall be operated only by personnel approved by Purchaser, if so requested by Purchaser.

BT7.4 Fire Suppression Costs. Purchaser's obligations for cost of fire suppression vary according to three classifications of fires as follows:

BT7.41 Operations Fire. An "Operations Fire" is a fire caused by Purchaser's Operations other than a Negligent Fire.

Forest Service, except as provided in BT7.3, shall use cooperative deposits under BT4.218 to perform fire suppression activities on Operations Fires. Purchaser agrees to reimburse Forest Service for such cost for each Operations Fire, subject to a maximum of the dollar amount stated in AT11. The cost of Purchaser's actions, supplies, and equipment on any such fire provided pursuant to BT7.3, or otherwise at the request of Forest Service, shall be credited toward such maximum. If Purchaser's actual cost exceeds Purchaser's obligation stated in AT11, Forest Service shall reimburse Purchaser for the excess.

BT7.42 Negligent Fire. A "Negligent Fire" is a fire caused by negligence or fault of Purchaser's Operations, including, but not limited to, one caused by smoking by persons engaged in Purchaser's Operations during the course of their employment, or during rest or lunch periods; or if Purchaser's failure to comply with the requirements of BT7.2 and BT7.3 results in a fire starting or permits a fire to spread. Damages and the cost of suppressing Negligent Fires shall be borne by Purchaser.

BT7.43 Other Fires on Sale Area. Forest Service shall pay Purchaser, at fire fighting rates common in the area or at prior agreed rates, for equipment or personnel furnished by Purchaser pursuant to BT7.3, or otherwise at the request of Forest Service, on any fire on Sale Area other than an Operations Fire or a Negligent Fire.

BT7.5 State Law. Purchaser shall not be relieved by the terms of this contract of any liability to the United States for fire suppression costs recoverable in an action based on State law, except for such costs resulting from Operations Fires. Amounts due Purchaser for fire fighting expenditures in accordance with BT7.41 shall not be withheld pending settlement of any such claim or action based on State law.

BT7.6 Performance by Contractor. Where Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents perform Purchaser's Operations in connection with fire responsibilities, Purchaser's obligations shall be the same as if performance was by Purchaser.

BT8.0—OTHER CONDITIONS

BT8.1 Title and Liability.

BT8.11 Title Passage. All right, title, and interest in and to any Included Timber shall remain in Forest Service until it has been Measured, removed from Sale Area or other authorized cutting area, and paid for, at which time title shall vest in Purchaser. For purposes of this Subsection, timber in Payment Units Released for Cutting covered by cash deposit or payment guarantee under BT4.3 shall be considered to have been paid for. Title to any Included Timber that has been Measured and paid for, but not removed from Sale Area or other authorized cutting area by Purchaser on or prior to Termination Date, shall remain in Forest Service.

BT8.12 Liability for Loss. If Included Timber is destroyed or damaged by an unexpected event that significantly changes the nature of Included Timber, such as fire, wind, flood, insects, disease, or similar cause, the party holding title shall bear the timber value loss resulting from such destruction or damage; except that such losses caused by insect or disease after felling of timber shall be borne by Purchaser, unless Purchaser is prevented from removing such timber for reasons that would qualify for Contract Term Adjustment. Deterioration or loss of value of salvage timber is not an unexpected event, except for deterioration due to delay or interruption that qualifies for Contract Term Adjustment or under BT8.33.

In the event Included Timber to which Forest Service holds title is destroyed, Purchaser will not be obligated to remove and pay for such timber. In the event Included Timber to which Forest Service holds title is damaged, Contracting Officer shall make an appraisal to determine for each species the difference between the appraised unit value of Included Timber immediately prior to the value loss and the appraised unit value of timber after the loss. Current Contract Rates in effect at the time of the

value loss shall be adjusted by differences to become the redetermined rates.

There shall be no obligation for Forest Service to supply, or for Purchaser to accept and pay for, other timber in lieu of that destroyed or damaged. This Subsection shall not be construed to relieve either party of liability for negligence.

BT8.2 Period of Contract. All obligations of Purchaser shall be discharged not later than "Termination Date" stated in AT12, unless it is adjusted pursuant to BT8.21 or BT8.212 or extended pursuant to BT8.23 or BT8.32, excepting only those obligations for which Forest Service has given written permission to delay performance. Such written permission shall be considered a Contract Term Adjustment for the purpose of Purchaser completing performance of obligations covered by such permission.

BT8.21 Contract Term Adjustment. "Contract Term Adjustment" means adjustment only as provided for in the three circumstances described in this Subsection. Under these circumstances, the contract term shall be adjusted in writing to include additional calendar days in one or more Normal Operating Seasons equal to the actual time lost, except as limited by paragraph (b) in this Subsection.

To qualify for such adjustment, Purchaser shall give written notice of the lost time not later than 30 days after end of Normal Operating Season in which time was lost and at least 10 days before Termination Date. Contracting Officer shall make prompt written acknowledgment of such notice, indicating concurrence with the number of days in the notice or the number of days Forest Service considers as qualifying for the adjustment. Lost portions of days shall be disregarded in computing time lost. The three circumstances qualifying for a Contract Term Adjustment are:

(a) Purchaser experiences delay in starting scheduled operations or interruptions in active operations, either of which stops removal of Included Timber from Sale Area through curtailment in felling and bucking, yarding, skidding and loading, hauling, or road construction, as scheduled under BT6.31, for 10 or more consecutive days during a Normal Operating Season due to causes beyond Purchaser's control, including, but not limited to, acts of God, acts of the public enemy, acts of the Government, labor disputes, fires, insurrections, or floods.

(b) Causes described in paragraph (a) substantially affect the disposition or processing of Included Timber during Normal Operating Season through their effects on primary timber processing facilities, with a resulting delay of 60 days or more in use of such facilities. In such event, Contract Term Adjustment shall not extend for more than 12 consecutive months.

(c) (i) Contracting Officer requests Purchaser, in writing, to delay or interrupt operations during the Normal Operating Season for any purpose other than suspension under BT4.4 or BT9.3 or

(ii) Purchaser suffers a delay or interruption of Purchaser's Operations affecting skidding, yarding,

and loading because of fire emergency closure ordered by Forest Service (or another agency in its behalf), and the total of such lost time is 10 or more days during any Normal Operating Season.

If Termination Date is adjusted, as described in this Subsection, and later extended under BT8.23, the appraisal for the extension shall be made as of the unadjusted Termination Date, but the date on which the new rates become effective, if higher than Current Contract Rates immediately prior to Termination Date, shall be the adjusted Termination Date.

BT8.211 Delay in Reconstruction of Processing Facilities. Notwithstanding the 12-month limitation in BT8.21, if Purchaser demonstrates a diligent effort has been made to replace primary timber processing facilities and that delays in doing so have been beyond Purchaser's control, Contracting Officer may authorize Contract Term Adjustment up to a total of 24 months.

BT8.212 Market-Related Contract Term Addition. The term of this contract may be adjusted when a drastic reduction in wood product prices has occurred in accordance with 36 CFR 223.52. The Producer Price Index used to determine when a drastic reduction in price has occurred is stated in AT17. Purchaser will be notified whenever the Chief determines that a drastic reduction in wood product prices has occurred. If the drastic reduction criteria specified in 36 CFR 223.52 are met for 2 consecutive calendar quarters, after contract award date, Contracting Officer will add 1 year to the contract term, upon Purchaser's written request. For each additional consecutive quarter such a drastic reduction occurs, Contracting Officer will, upon written request, add an additional 3 months to the term during Normal Operating Season. Contracting Officer must receive Purchaser's written request for a market-related contract term addition before the expiration of this contract.

The total amount of contract term addition is limited to the lesser of twice the length of the original contract or 3 years. The revised contract term may not exceed 10 years as a result of market-related contract term addition. Additional contract time may not be granted for those portions of the contract that have a required completion date or for those portions of the contract where Contracting Officer determines that the timber is in need of urgent removal or that timber deterioration or resource damage will result from delay.

When a contract is lengthened as a result of market-related contract term addition, any subsequent periodic payment date shall be delayed 1 month for each month added to the contract's term.

BT8.22 Termination for Catastrophe. In event of Catastrophic Damage, this contract may be modified under BT8.32, following rate redetermination under BT3.32, or terminated under this Subsection. Such termination shall not be considered a termination under BT8.34.

BT8.221 Termination by Purchaser. This contract shall be terminated, upon election and written notice by Purchaser, if Catastrophic Damage rate redetermination under BT3.32 shows that the appraised

weighted average Indicated Advertised Rate of all Included Timber remaining immediately prior to the catastrophe has been reduced through Catastrophic Damage by an amount equal to or more than the weighted average Current Contract Rate.

"Indicated Advertised Rates" are Forest Service estimates of fair market value of the timber.

BT8.222 Termination by Forest Service. This contract may be terminated by written notice from Contracting Officer, if there is Catastrophic Damage and Purchaser does not agree, under BT8.32, within 30 days of receipt from Contracting Officer of contract modifications proposed to permit the harvest of the catastrophe-affected timber.

BT8.23 Contract Term Extension. "Contract Term Extension" means an extension of the term of this contract, at the request of Purchaser, under this Subsection. This Subsection does not obligate Contracting Officer to grant Contract Term Extension.

When such extension is made, Forest Service shall make an appraisal using standard Forest Service methods and appraisal data in effect 45 days prior to the original Termination Date. Bid Premium Rates shall be added to such appraised rates to establish Flat Rates or Tentative Rates for the extension period. In event rates so established would develop Current Contract Value immediately prior to such an extension that is less than Current Contract Value at that time, Flat Rates and Tentative Rates in effect immediately prior to extension shall be retained for the extension period.

In consideration for granting an extension, Purchaser shall pay the Government for Purchaser's failure to cut and remove timber meeting Utilization Standards prior to Contract Term Extension, an amount that shall be the total of the costs to the Government resulting from the delay in harvest of Included Timber. Such costs will be determined by Forest Service and shall include, but not be limited to, the following:

(a) Interest at the Current Value of Funds Rate established by the Secretary of the Treasury, on Current Contract Value of timber remaining on Sale Area, less the credit balance of any deposit made pursuant to BT4.213, as of the original Termination Date, or as adjusted pursuant to BT8.21 or BT8.212, until the midpoint of the extension period;

(b) Increased costs of regeneration, including nursery stock loss, carryover, or replacement costs; and

(c) Costs of remarking timber on Sale Area, reestablishing cutting unit boundaries, and/or remarking areas requiring protection on Sale Area.

BT8.231 Conditions for Contract Term Extension. Contracting Officer may grant Purchaser's written request for Contract Term Extension, if Purchaser has met all of the following conditions at time of Purchaser's request:

(a) At least 75 percent of estimated quantity in AT2 has been cut and removed from Sale Area.

(b) Specified Roads needed by Purchaser for removal of all Included Timber, in accordance with the approved Plan of Operations submitted pursuant to

BT6.311, were constructed and accepted by Forest Service prior to the applicable road completion date shown in CT5.13.

(c) Purchaser's Operations to date have been in reasonable compliance with contract terms and the approved Plan of Operations under BT6.311.

(d) All contractual requirements have been met by Purchaser and accepted by Forest Service on area cut over at time of Purchaser's request, except for areas where logging is in progress at time of Purchaser's request. Purchaser's burning of current slash or seeding or planting for erosion control may be temporarily waived, if weather or other considerations make such work impractical.

(e) Any payment required under BT4.213 has been made.

Contract Term Extension shall not become effective, unless payments required by BT8.23 have been paid and the initial Extension Deposit required by BT4.217 has been made by the effective date of any extension.

BT8.3 Contract Modification. The conditions of this timber sale are completely set forth in this contract. Except as provided in BT8.32 and BT8.33, this contract can be modified only by written agreement between the parties. Only Contracting Officer may make contract modifications, with compensating adjustments to Current Contract Rates where appropriate, on behalf of Forest Service.

BT8.31 Changed Conditions. When it is agreed that the completion of certain work or other requirements hereunder would no longer serve the purpose intended because of substantial change in the physical conditions of Sale Area or Included Timber since the date of this contract, the requirements shall be waived in writing. The estimated cost of such waived work or other requirement shall be charged to Timber Sale Account.

BT8.32 Modification for Catastrophe. In event of Catastrophic Damage, Forest Service, in consultation with Purchaser, shall outline on Sale Area Map:

(a) Any areas of catastrophe-affected live and dead timber meeting Utilization Standards and having undesignated timber so situated that it should be logged with the designated timber;

(b) If needed, any such areas where the damaged undesignated timber can reasonably be logged separately; and

(c) Areas of affected or unaffected timber that are to be eliminated from Sale Area.

Forest Service shall locate and post the boundaries of all such areas, as needed.

After Sale Area Map has been outlined under this Subsection, Forest Service may propose contract modification to permit the harvest of catastrophe-affected timber. If Purchaser accepts Forest Service proposed modifications, this contract shall be modified to include rates redetermined under BT3.32 and other related revisions as necessary, such as revision of Operating Schedule to ensure prompt removal of affected timber when necessary to avoid further loss and provision for additional contract time, if needed.

BT8.33 Contract Suspension and Modification. (a) Contracting Officer may, by written order, delay or interrupt authorized operations under this contract or, notwithstanding BT8.3, modify this contract, in whole or in part:

(i) To prevent environmental degradation or resource damage, including, but not limited to, harm to habitat, plants, animals, cultural resources, or cave resources;

(ii) To ensure consistency with land and resource management plans or other documents prepared pursuant to the National Environmental Policy Act of 1969, 42 USC 4321-4347;

(iii) To conduct environmental analysis, including, but not limited to, engaging in consultation pursuant to the Endangered Species Act of 1973, 16 USC 1531, et seq.; or

(iv) Upon agreement of the Regional Forester, due to administrative appeal or litigation, regardless of whether Contracting Officer's order is required by a court order or this contract is named in such a proceeding.

(b) In the event of an order delaying or interrupting Purchaser's Operations under this Subsection, Purchaser's remedy shall be:

(i) Contract Term Adjustment,

(ii) reimbursement for Out-of-Pocket Expenses,

(iii) rate redetermination to measure any decline in the market,

(iv) temporary reduction of downpayment,

(v) temporary credit for unamortized Specified Road construction cost, and

(vi) temporary bond reduction.

However, the foregoing remedies shall be available only to the extent that the Contracting Officer's order was the sole and exclusive cause of the delay or interruption of Purchaser's operations.

(c) In cases of modification under this Subsection, Purchaser shall only receive a rate redetermination pursuant to BT3.31. However, if there is an order delaying or suspending operations in addition to a modification, then Purchaser shall also be entitled to the remedies provided under BT8.33(b) for such delay or suspension.

(d) Remedies awarded to the Purchaser shall not be duplicative, and Contracting Officer shall have the right to structure remedies provided herein to avoid duplicative compensation.

(e) Purchaser agrees that this Subsection, and the remedies provided herein shall apply regardless of any finding by any court or administrative body that the Forest Service failed to comply with any statute, regulation and/or policy in connection with awarding, advertising, or authorizing this sale, or a similar sale. However, nothing in this Subsection precludes Purchaser from exercising rights under the Contract Disputes Act.

BT8.34 Contract Termination. This contract may be terminated, in whole or in part, by Forest Service or Purchaser, as provided in Items BT8.341 and BT8.342, respectively. In the event of any such termination, Purchaser shall be entitled to the applicable remedies, subject to the limitation upon duplicative compensation

set forth in BT8.33(d). Purchaser agrees that this Subsection, and the remedies contained in the following Items shall apply regardless of any finding by any court or administrative body that the Forest Service failed to comply with any statute, regulation and/or policy in connection with awarding, advertising, or authorizing this sale, or a similar sale. However, nothing in this Subsection precludes Purchaser from exercising rights under the Contract Disputes Act.

BT8.341 Termination by Forest Service.

(a) The Chief or the Chief's designee may unilaterally terminate this contract, in whole or in part, for any of the reasons set forth in paragraph (a) of BT8.33.

(b) Purchaser's compensation for termination of this contract under this Item shall be:

(i) refund or release of advanced deposits for timber cut but not removed,

(ii) reimbursement for Out-of-Pocket Expenses, and

(iii) replacement timber under subparagraph (c), and/or liquidated damages under subparagraph (d); provided that liquidated damages shall be available if, and only if, after good faith efforts, the Parties (1) cannot locate replacement timber or agree upon the applicable stumpage price, or (2) the volume of deleted timber exceeds the volume of any replacement timber.

(c) Subject to applicable laws, regulations and policies, Forest Service and Purchaser shall make good faith efforts to identify replacement timber of similar volume, quality, access, and topography within Sale Area. If suitable replacement timber cannot be located within Sale Area, the parties shall expand the search to the National Forest in which the Sale Area is located. Stumpage price shall be adjusted under BT3.31 to account for differences between replacement timber and deleted timber. If Forest Service and Purchaser agree upon suitable replacement timber and the applicable stumpage price, then this contract shall not terminate and instead shall be modified pursuant to 36 CFR 223.85(c) and shall remain in force with respect to such replacement timber and, in the case of partial termination, any remaining Included Timber. If the parties cannot agree on suitable replacement timber or the applicable stumpage price of such timber, either party may end the search and Purchaser shall be compensated under subparagraph (d).

(d) Forest Service shall pay as fixed, agreed, and liquidated damages an amount equivalent to 15 percent of the estimated delivered log value of the volume of timber not harvested due to the termination or partial termination. Estimated delivered log value and volume of timber not harvested shall be determined by the Contracting Officer as of Termination Date, using Forest Service methods in use as of the Termination Date.

(e) In any instance of partial termination, in which the Forest Service deletes one or more cutting units from the Sale Area, Purchaser's sole and exclusive remedy with regard to remaining units shall be a rate redetermination pursuant to BT3.31. Purchaser shall be required to complete Contract Operations with regard to remaining

units and any obligations pertaining to cessation of operations on deleted units, including without limit erosion control, brush disposal, and road maintenance. If Purchaser fails to fulfill any such duty or obligation, then Contracting Officer may make deductions from compensation due Purchaser, including without limit costs and expenses of completing such work.

BT8.342 Termination by Purchaser. (a)

Purchaser may, by written notice, terminate this Contract, in whole or in part, as described herein,

(i) in the event of an order delaying or interrupting its operations pursuant to BT8.33, or

(ii) in the event of an order modifying this Contract pursuant to BT8.33, if Purchaser decides to reject the terms of the modification prior to its acceptance. Purchaser shall have the right to terminate this Contract in whole only when the Contracting Officer's order under BT8.33 applies to all cutting units within the Sale Area. When the order affects only a portion of the cutting units, Purchaser shall have the right to terminate this Contract in part, by deleting one or more of the units covered by the Contracting Officer's order. The foregoing right of termination, in whole or in part, shall not exist when the delay, interruption, or modification arises from wind, flood, landslide, fire, forest pest epidemic, or other major natural phenomenon.

(b) Purchaser's compensation for termination of this Contract, in whole or in part, under this Item shall be:

(i) refund or release of advanced deposits for timber cut but not removed,

(ii) reimbursement for Out-of-Pocket Expenses, and

(iii) if the duration of the delay or interruption exceeds either six months of Normal Operating Season time, or one calendar year from the date of the order, then: replacement timber as provided under (c) and/or liquidated damages under (d); provided that liquidated damages shall be available if, and only if, after good faith efforts, the Parties (1) cannot locate replacement timber or agree upon the applicable stumpage price, or (2) the volume of deleted timber exceeds the volume of any replacement timber.

(c) Subject to applicable laws, regulations and policies, Forest Service and Purchaser shall make good faith efforts to identify replacement timber of similar volume, quality, access, and topography within Sale Area. If suitable replacement timber cannot be located within Sale Area, the parties shall expand the search to the National Forest in which the Sale Area is located. Stumpage price shall be adjusted under BT3.31 to account for differences between replacement timber and deleted timber. If Forest Service and Purchaser agree upon suitable replacement timber and the applicable stumpage price, then this contract shall not terminate and instead shall be modified pursuant to 36 CFR 223.85(c) and shall remain in force with respect to such replacement timber and, in the case of partial termination, any remaining Included Timber. If the parties cannot agree on suitable replacement timber or the applicable stumpage price of such timber, either party may end the

search and Purchaser shall be compensated under subparagraph (d).

(d) Forest Service shall pay as fixed, agreed, and liquidated damages an amount equivalent to 15 percent of the estimated delivered log value of the volume of timber not harvested due to the termination or partial termination. Estimated delivered log value and volume of timber not harvested shall be determined by the Contracting Officer as of Termination Date, using Forest Service methods in use as of the Termination Date.

(e) In any instance of partial termination, in which Purchaser deletes one or more cutting units from Sale Area, Purchaser's sole and exclusive remedy with regard to remaining units shall be a rate redetermination pursuant to BT3.31. Purchaser shall be required to complete Contract Operations with regard to remaining units and any obligations pertaining to cessation of operations on deleted units, including without limit, erosion control, brush disposal, and road maintenance. If Purchaser fails to fulfill any such duty or obligation, then Contracting Officer may make deductions from compensation due Purchaser, including without limit costs and expenses of completing such work.

BT8.35 Out-of-Pocket Expenses.

"Out-of-Pocket Expenses" are Unrecovered expenditures arising directly from performing the contract that were rendered unrecovered due to delay, interruption, or termination pursuant to BT8.33 or BT8.34. An expenditure is "Unrecovered" within the meaning of this Subsection when Purchaser did not gain the benefit of its expenditure because Contract operations were not permitted. In determining whether an expenditure is "Unrecovered," Contracting Officer shall not conclude that an award of liquidated damages constitutes the benefit of that expenditure.

(a) Out-of-Pocket Expenses shall not include, in particular and without limitation, any of the following:

- (i) attorneys fees;
- (ii) costs and expenses of operating a saw mill or other processing facility;
- (iii) expectancy damages; and,
- (iv) anticipatory profits.

(b) Forest Service shall reimburse Purchaser for only the following Out-of-Pocket Expenses:

(i) Out-of-Pocket Expenses for maintenance of the timber sale performance and payment bonds during the period when operations were delayed or interrupted or, if terminated, from the date operations were halted until the expiration of the bonds;

(ii) Out-of-Pocket Expenses for maintenance of the downpayment or other cash deposits during the period when operations were delayed or interrupted or, if terminated, from the date operations were halted until the cash is returned to Purchaser;

(iii) Out-of-Pocket Expenses for the lesser of move-out and move-in or leaving equipment and/or logging camps on site, if the Purchaser and Contracting Officer have agreed to leave equipment and/or logging camps on site in lieu of move-out and move-in;

(iv) Out-of-Pocket Expenses for felling, bucking,

logging, skidding, yarding, and decking any products so processed, but not removed from Sale Area because: (1) the sale was terminated, or (2) the products no longer meet Utilization Standards because of delay or interruption;

(v) If terminated, in whole or in part, Out-of-Pocket Expenses for unamortized Temporary Roads, road maintenance, dust abatement and improvements authorized under B6.2;

(vi) Out-of-Pocket Expenses for the investment in Specified Roads during the period when operations were delayed or interrupted or, if terminated in whole or in part, Out-of-Pocket Expenses for unamortized Specified Road construction and reconstruction; and

(vii) If terminated, in whole or in part, Out-of-Pocket Expenses for bid preparation, including review of sale offering.

(c) Purchaser shall submit documentation of claimed expenditures, including those actually paid and those for which the Purchaser has a legal obligation to pay but has not yet paid, and supporting analysis to Contracting Officer to assist in Contracting Officer's calculation of reimbursement. Contracting Officer shall determine the amount of reimbursement under this Subsection using information from Purchaser and/or Forest Service methods in use on the date that operations were delayed, interrupted, or terminated. Purchaser's failure to substantiate any claimed Out-of-Pocket Expense may constitute grounds for Contracting Officer's denial of reimbursement.

(d) Purchaser shall make reasonable efforts to minimize its Out-of-Pocket Expenses.

BT8.36 Termination for Market Change. a) In the event of delay or interruption under BT8.33, exceeding 90 days, and Contract has not been modified to include replacement timber, this contract may be terminated upon election and written notice by Purchaser, if (i) a rate redetermination for market change under BT3.33 shows that the appraised weighted average Indicated Advertised Rate of all Included Timber remaining immediately prior to the delay or interruption has been reduced through a market change by an amount equal to or more than the the weighted average Current Contract Rate, or (ii) the appraised value of the remaining timber is insufficient to cover the adjusted base rates as determined under BT3.33.

(b) Prior to termination under this Subsection, Purchaser shall complete all obligations on areas not affected by the delay or interruption.

(c) Damages caused by termination of contract under this Subsection will be limited to Out-of-Pocket Expenses.

BT8.4 Performance by Other than Purchaser. The acquisition or assumption by another party, under an agreement with Purchaser, of any right or obligation of Purchaser under this contract shall be ineffective as to Forest Service, until Forest Service has been notified of such agreement and Contracting Officer has given written approval. In no case shall such recognition or approval:

(a) Operate to relieve Purchaser of the responsibilities or liabilities Purchaser has assumed hereunder or

(b) Be given unless such other party:

(i) Is acceptable to Forest Service as a Purchaser of timber and assumes in writing all of the obligations to Forest Service under the terms of this contract as to the uncompleted portion thereof or

(ii) Acquires the rights in trust as security and subject to such conditions as may be necessary for the protection of the public interests.

BT8.5 Sale of Other Materials. Forest Service reserves the right to sell from Sale Area during the period of this contract any materials or products not subject to its terms, but shall not permit removal, possession, or use thereof that will materially interfere with Purchaser's Operations. Purchaser shall not be obligated to do any work made necessary by the action of others.

BT8.6 Provisions Required by Statute.

BT8.61 Covenant against Contingent Fees.

Purchaser warrants that no person or agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial agencies maintained by Purchaser for the purpose of securing business. For breach or violation of this warranty, Forest Service shall have the right to annul this contract without liability or to require Purchaser to pay, in addition to the contract price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

BT8.62 Officials Not to Benefit. No member of Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, unless it is made with a corporation for its general benefit (18 USC 431, 433).

BT8.63 Nondiscrimination in Employment. If the total value of this contract is in excess of \$10,000, Purchaser agrees during its performance as follows:

(a) Purchaser will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. Purchaser will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Purchaser agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by Forest Service setting forth the provisions of this Subsection.

(b) Purchaser will, in all solicitations or advertisements for employees placed by or on behalf of Purchaser, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(c) Purchaser will send to each labor union or representative of workers with which Purchaser has a collective bargaining agreement or other contract or under-

standing, a notice to be provided by Forest Service, advising the labor union or worker's representative of Purchaser's commitments under this Subsection, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) Purchaser shall comply with all provisions of Executive Order No. 11246, as amended by Executive Order No. 11375 and Executive Order No. 12086, and the rules, regulations, and relevant orders of the Secretary of Labor.

(e) Purchaser will furnish all information and reports required by Executive Order No. 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to books, records, and accounts by Forest Service and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(f) In event of Purchaser's noncompliance with this Subsection or with any of such rules, regulations, or orders, this contract may be terminated or suspended, in whole or in part, and Purchaser may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246, as amended, and such other sanctions may be imposed and remedies invoked, as provided in Executive Order or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(g) Purchaser will include the provisions of paragraphs (a) through (f) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246, as amended, so that such provisions will be binding upon each Subcontractor or vendor. Purchaser will take such action with respect to any subcontract or purchase order as Forest Service may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event Purchaser becomes involved in, or is threatened with, litigation with a Subcontractor or vendor as a result of such direction by Forest Service, Purchaser may request the United States to enter into such litigation to protect the interests of the United States.

BT8.64 Debarment and Suspension Certification. Pursuant to 7 CFR Part 3017, Purchaser shall obtain certifications from its Subcontractors regarding debarment, suspension, ineligibility, and voluntary exclusion, including additional Subcontractors obtained after award of this contract. "Subcontractors" are participants in lower tier covered transactions.

Purchaser may rely upon a certification of a prospective Subcontractor that it is not proposed for debarment under 48 CFR 9.4, debarred, suspended, ineligible, or voluntarily excluded from participating in covered transactions or timber sales, unless Purchaser knows that the certification is erroneous.

Purchaser shall keep the certifications of its Subcontractors on file until timber sale Termination Date and any extensions thereof, and will provide a copy at the written request of Contracting Officer. Nothing contained in the foregoing shall be construed to require

establishment of a system of records in order to render in good faith the certification required by this Subsection. The knowledge and information of Purchaser is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

If Purchaser knowingly enters into a timber sale transaction with a person who is proposed for debarment under 48 CFR 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in covered transactions or timber sales, in addition to other remedies available to the Government, Forest Service may pursue available remedies, including suspension and/or debarment.

The Subcontractor for a timber sale shall complete a "Subcontractor Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion." An example of this certification is shown following the instructions for page 101 of this contract.

BT8.65 Contract Consistency With Other Laws. The contract shall govern if State and local environmental quality laws conflict with or preclude performance of contractual requirements.

BT9.0—PERFORMANCE AND SETTLEMENT

BT9.1 Performance Bond. As a further guarantee of the faithful performance of the provisions of this contract, Purchaser delivers herewith and agrees to maintain a surety bond in the dollar amount stated in AT14, unless the amount is adjusted as provided in BT9.11 or BT9.13. In lieu of surety bond, Purchaser may deposit into a Federal Depository, as directed by Forest Service under BT4.21, and maintain therein, cash in the dollar amount stated in AT14 or negotiable securities of the United States having market value at time of deposit of not less than the dollar amount stated in AT14.

Any adjustment or extension of time for completion of this contract beyond 1 year may be granted only with the consent of surety on bond or delivery of a new bond. Should the sureties on the bond delivered herewith, or any bond delivered hereafter in connection with this contract, become unsatisfactory to Forest Service, Purchaser shall, within 30 days of receipt of demand, furnish a new bond with surety satisfactory to Forest Service.

BT9.11 Bond Reduction. Upon Purchaser's written request, Contracting Officer shall redetermine the amount of Purchaser's performance bond to an amount not less than Purchaser's remaining obligations, including the value of Included Timber remaining on Sale Area, plus the estimated cost of uncompleted work required of Purchaser and any unpaid billings due on the timber sale. Contracting Officer shall provide written notice of the redetermined amount to Purchaser and to Purchaser's surety. Similarly, Contracting Officer shall report to Purchaser in writing the amount of deposited cash or deposited securities required thereafter, if such deposits exist in lieu of a surety bond.

As soon as security for the performance of this contract or the settlement of Claims incident thereto is no longer necessary, appropriate notice shall be given to

surety or deposits that may have been made in lieu of surety bond shall be returned to Purchaser, subject to the conditions in BT9.5.

BT9.12 Letters of Credit. Notwithstanding the provisions of BT9.1, approved letters of credit may be used in lieu of a surety bond for performance bond purposes. Such letters of credit shall be subject to approval by Contracting Officer.

BT9.13 Temporary Bond Reduction. When, under BT8.33, Contracting Officer orders a delay or interruption of Purchaser's Operations for more than 30 days when scheduled operations would be occurring but for the order, the performance bond amount required shall be temporarily reduced upon the written request of Purchaser or at the discretion of Contracting Officer. For the period of the delay or interruption, the performance bond may be reduced to an amount not less than the estimated cost of uncompleted work required of Purchaser and any unpaid billings due on the timber sale.

Upon Purchaser's receipt of written notice from Contracting Officer that the basis for the delay or interruption no longer exists, Purchaser shall restore the performance bond to the full amount shown in AT14 within 15 days. Purchaser shall not resume contract operations until the performance bond amount is fully restored.

BT9.2 Disputes. This contract is subject to the Contract Disputes Act of 1978 (41 USC 601, *et seq.*). Except as provided in the Contract Disputes Act of 1978, all disputes arising under or relating to this contract shall be resolved in accordance with this Section.

As used herein, "Claim" means a written demand or assertion by one of the parties seeking, as a legal right, the payment of money, adjustment or interpretation of contract terms, or other relief, arising under or relating to this contract. A voucher, invoice, or request for payment that is not in dispute when submitted is not a Claim. However, where such submission is subsequently not acted upon in a reasonable time, or disputed either as to liability or amount, it may be converted to a Claim. A Claim by Purchaser shall be made in writing and submitted to Contracting Officer for decision. A Claim by the Government against Purchaser shall be subject to a decision by Contracting Officer.

For Purchaser Claims of more than \$100,000, Purchaser shall submit with the Claim a certification that the Claim is made in good faith; the supporting data are accurate and complete to the best of Purchaser's knowledge and belief; and the amount requested accurately reflects the contract adjustment for which Purchaser believes the Government is liable. Purchaser, if an individual, shall execute the certification. When Purchaser is not an individual, the certification shall be executed by a senior company official in charge at Purchaser's plant or location involved or by an officer or general partner of Purchaser having overall responsibility for the conduct of Purchaser's affairs.

For Purchaser Claims of \$100,000 or less, Contracting Officer must render a decision within 60 days. For Purchaser Claims in excess of \$100,000, Contracting Of-

ficer must decide the Claim within 60 days or notify Purchaser of the date when the decision will be made.

Contracting Officer's decision shall be final unless Purchaser appeals or files a suit.

The authority of Contracting Officer does not extend to Claims or disputes that by statute or regulation other agencies are expressly authorized to decide.

Interest, at the Prompt Payment Rate established by the Secretary of the Treasury, on the amount found due on Purchaser's Claim shall be paid from the date the Claim is received by Contracting Officer until the date of the payment.

Except as the parties may otherwise agree, pending final resolution of a Claim of Purchaser arising under the contract, Purchaser shall proceed diligently with the performance of the contract in accordance with Contracting Officer's decision.

BT9.21 Time Limits for Submission of Claim.

Failure by Purchaser to submit a Claim within established time limits shall relinquish the United States from any and all obligations whatsoever arising under the contract or portions thereof. Purchaser shall file such Claim within the following time limits:

(a) When Purchaser constructs Specified Road, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification of acceptance;

(b) When Forest Service constructs Specified Road, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification authorizing use of road;

(c) For Payment Units and cutting units, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification that Payment Unit has been accepted; and

(d) In all other cases, Purchaser must file any Claim not later than 60 days after receipt of Contracting Officer written notification that timber sale is closed.

BT9.22 Contract Documents. All contract documents are intended to be consistent with each other. In case of discrepancy, the following is the order of precedence:

- (a) Special Provisions (CT)
- (b) Sale Area Map
- (c) Specific Conditions (AT) and Schedule of Items
- (d) Standard Provisions (BT)
- (e) Special project specifications
- (f) Plans, such as slash, erosion control, and dust abatement
- (g) Agreements between Purchaser and Forest Service, as authorized under the contract
- (h) Plans:
 - (i) Figured dimensions over scaled dimensions
 - (ii) Large scale Plans over small scale Plans
- (i) Standard specifications
- (j) Lists and/or tables in Plans over any conflicting notations on Plans
- (k) Shop Drawings

BT9.3 Breach. In event Purchaser breaches any of the material provisions of this contract, Forest Service

shall give Purchaser notice of such breach and, allowing reasonable time for remedy of such breach and of Forest Service's election to suspend, may give notice to suspend all or any part of Purchaser's Operations. Such notice of breach and notice to suspend Purchaser's Operations shall be written, except oral notices may be given if such breach constitutes an immediate threat to human life or a threat of immediate and irreparable damage to National Forest resources. Notwithstanding Section BT6.1, such oral suspension notice may be given to Purchaser's work supervisor or, in work supervisor's absence, to those performing the operation. An oral suspension notice shall be promptly followed by telephone notice and a written explanation from Forest Service to Purchaser.

Suspension under this Section shall not entitle Purchaser to any remedies arising under BT8.33.

Immediately upon oral or written suspension, Forest Service representative shall notify Contracting Officer of the suspension and related circumstances. Contracting Officer shall promptly review the suspension to determine if the suspension should be continued or lifted. Such suspension shall be lifted as early as conditions permit.

Upon receipt of oral or written notice of such breach, Purchaser shall remedy the breach as follows:

(a) If remedying such breach requires on-the-ground action by Purchaser, Purchaser shall have 30 practicable operating days during Normal Operating Season to remedy the breach, except under emergency conditions when action should not be delayed to prevent major damage or

(b) If such breach does not require on-the-ground action by Purchaser, such breach shall be remedied within 30 days.

BT9.31 Termination for Breach. Contracting Officer, with the concurrence of the Regional Forester, may terminate this contract for breach in the event Purchaser:

(a) Is convicted for violation of criminal statutes, civil standards, or any other offense indicating a lack of business integrity or honesty that seriously and directly affects the responsibility of Purchaser; including, but not limited to:

(i) Theft, forgery, bribery, embezzlement, falsification or destruction of records, making false statements, or receiving stolen property, any of which occurred in connection with obtaining, attempting to obtain, selling, trading, or processing public timber;

(ii) Fraud, criminal offenses, or violation of Federal or State antitrust laws, any of which occurred in connection with obtaining, attempting to obtain, or performing a public contract or subcontract; or

(iii) Threatening, resisting, intimidating, or interfering with Forest Officers engaged in, or on account of, the performance of their official duties involving the protection, improvement, or administration of National Forest lands;

(b) Is convicted for violation of criminal statutes or civil standards, orders, permits, or other regulations for environmental protection issued by a Federal agency, State agency, or political subdivision thereof in the conduct of operations hereunder on National Forest lands, pursuant to BT6.01;

(c) Has engaged in a pattern of activity that demonstrates flagrant disregard for the terms of this contract, such as, but not limited to, repeated suspensions for breach pursuant to BT9.3, causing undesignated timber meeting Utilization Standards to be unnecessarily damaged or negligently or willfully cut, or causing other serious environmental degradation or resource damage;

(d) Fails to comply with contract provisions related to nondiscrimination in employment; or

(e) Fails to remedy a breach of contract within time limits stated in BT9.3.

Damages due the United States for termination under this Subsection shall be determined pursuant to BT9.4.

BT9.4 Damages for Failure to Cut or Termination for Breach. (a) In event of Purchaser's failure to cut designated timber on portions of Sale Area by Termination Date or termination for breach under BT9.31, Forest Service shall appraise remaining Included Timber, unless termination is under BT8.22 or BT8.34. Such appraisal shall be made with the standard Forest Service method in use at time of termination.

(b) If the sale is resold, damages due shall be the amount by which Current Contract Value, plus costs described in paragraph (d) of this Section, exceeds the resale value at new Bid Rates.

(c) If the contract is not reoffered or there are no responsive bids on the reoffered contract, damages due shall be the amount by which Current Contract Value exceeds the value determined by appraisal, plus costs described in paragraph (d) of this Section.

(d) If applicable, the following costs shall be included in damages:

(i) The cost of resale or reoffering, including, but not limited to, salary costs, document preparation and duplication costs, mailing costs, and timber sale advertisement costs.

(ii) If Purchaser has failed to cut individual trees in the portions of Sale Area cut over and there is no resale of such individual trees, Purchaser shall pay Forest Service for cost of felling and removal or otherwise eliminating such uncut trees, except for occasional trees not cut for reasons stated in BT6.4.

(iii) The Government's loss caused by the delay in receipt of stumpage payments. Such loss will be measured by interest at the Current Value of Funds Rate established by the Secretary of the Treasury, on the unpaid contract value at Termination Date. Interest will be charged for the total number of months, or portions thereof, from Termination Date until midpoint of the contract resale period, less any time in excess of 1 year needed to make the resale.

(iv) Any increase in reforestation costs, including site preparation, seeding, and planting caused by Purchaser's failure to harvest Included Timber by Termination Date.

BT9.5 Settlement. If obligations of Purchaser have not been fully discharged by Termination Date, any money advanced or deposited hereunder shall be retained and applied toward unfulfilled obligations of Purchaser without prejudice to any other rights or remedies of Forest Service. Such funds may be treated as cooperative deposits under BT4.218 for uncompleted work 30 days after receipt of written notice from Contracting Officer to Purchaser of work to be done and Purchaser's failure to deny the obligation or to do the work.

BT9.6 Contract Closure. Contracting Officer shall give appropriate written notice to Purchaser when Purchaser has complied with the terms of this contract. Purchaser shall be paid refunds due from Timber Sale Account under BT4.24 and excess cooperative deposits under BT4.218.

DIVISION CT

Special Provisions

In accordance with AT19, the Sections, Subsections, and Items therein listed are attached and made a part hereof. The material is indexed by the numbering system used in Division BT. The numbers after the CT (that identifies material in this Division) indicates the Part, Section, Subsection, or Item of Division BT that is being supplemented or modified by each particular provision included in this Division.

USDA FOREST SERVICE

REPORT OF TIMBER SALE

APPRAISAL SUMMARY

Region: 5		Forest: Shasta-Trinity-14		Appr To: Weaverville (saw)				Appraisal Date: 24-Jan-08		
Appraiser: Laurie		District: Hayfork-52		Appraisal Type: <u>TEA (state-wide)</u>				Rollback Factor: 0%		
Sale #: 52801		Sale Name: Hyampom ROW Settlement		Base Period: 7/20/07-1/16/08				Required KV Cost: 0.00		
Species and Volumes		1	2	3	4	5	6	7	Average	Total
1. Species		PP/JP	SP/WWP		DF					
2. Species Code		122	117		205					
3. Product-Unit of Measure		01-03	01-03		01-03					
4. % by Species Volume		4.2%	6.5%	0.0%	89.3%	0.0%	0.0%	0.0%		100.0%
5. Volume - CCF		6.42	9.81	0.00	135.04	0.00	0.00	0.00		151.27
5a. Volume - MBF		4.01	6.48	0.00	92.04	0.00	0.00	0.00		102.54
5b. Volume - Green Tons		0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
6a. Log Pond Value - \$/CCF		218.74	246.97	160.00	293.08	225.00	132.50		286.93	
6b. Base Period Avg Bid - \$/CCF									40.43	
Sale Costs Adjustments - \$/CCF		Base	Sale	Adjustment	Road & Haul Informantion				Miles	Total Cost
7. Average Log Pond Values		190.58	286.93	96.35	Specified Road Constuction				0.00	0.00
8. PAL Fire Protection		6.08	29.13	-23.05	Specified Road Reconstruction				0.00	0.00
9. Stump-to-Truck		107.01	0.00	107.01	Temp Road Construction				0.00	0.00
10. Biomass		15.42	0.00	15.42	Haul Miles (sawlogs)				0.00	
11. Hauling		45.16	26.91	18.25	Haul Miles (biomass)				0.00	
12. Sale Specific		3.71	0.00	3.71						
13. Slash Work		2.21	0.00	2.21						
14. Erosion Control		2.57	0.00	2.57						
15. Specified Road Cost		2.12	0.00	2.12						
16. Road Maintenance		6.26	0.00	6.26						
17. Brush Disposal Deposit		2.85	0.00	2.85						
18. Surface Replacement Deposit		0.91	0.00	0.91						
19. Road Maintenance Deposit		0.65	0.00	0.65						
20. Engineering Deposit		0.26	0.00	0.26						
21. Temporary Road Cost		0.80	0.00	0.80						
22.										
23. Total Adj. & Adjusted Bid									Total Adj	Adj. Bid
									236.32	276.75
Advertised Rates - \$/CCF		1	2	3	4	5	6	7	Average	Total
24. Avg Bid Alloc to Species		210.98	238.21	0.00	282.68	0.00	0.00		276.75	41,864.66
25. Rollback Percent		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	saw timber
26. Indicated Advertised Rate		210.98	238.21	0.00	282.68	0.00	0.00	0.00	276.75	41,864.66
27. Regional Minimum Rates		27.95	27.95	0.00	27.95	0.00	0.00	0.00	27.95	4,228.00
28. Base Rates		27.95	27.95	0.00	27.95	0.00	0.00	0.00	27.95	4,228.00
29. Adjustment to Base Rates		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	saw timber
30a.Advertised Rates		210.98	238.21	0.00	282.68	0.00	0.00	0.00	276.75	41,864.66
30b.Total Sale Value										41,864.66
Appraisal Factors		1	2	3	4	5	6	7	Average	Total
31. Base Indices		260.06	351.74	0.00	184.91	0.00	0.00	0.00		
32. Index Name Code		WWPAE	WWPAF	0.0000	WWPAF	0.0000	0.0000	0.0000		
33. Rollback Amount		0.00	0.00	0.00	0.00	0.00	0.00	0.00		
34. Quadradic Mean Diameter		17.6	22.7	0.0	23.6	0.0	0.0	0.0		
35. Conversion Factor (mbf/ccf)		0.6252	0.6608	0.5000	0.6816	0.5000	0.5000		0.6778	saw timber
36. Timber Property Value		17.95	17.95	0.00	17.95	0.00	0.00			

Species	Net MBF 6"-12"	Net MBF 13"-15"	Net MBF 16"-24"	Net MBF 25"-32"	Net MBF 33" +	Net MBF 6"-11"	Net MBF 12"-19"	Net MBF 20"-23"	Net MBF 24" +	Net MBF 6"-15"	Net MBF* 16" +	Net MBF camp run
PP/JP	0.00	0.00	0.00	0.00	0.00	0.61	1.52	0.90	0.99	0.00	0.00	
SP/WWP	0.00	0.00	0.00	0.00	0.00	0.48	2.34	1.84	1.82	0.00	0.00	
WF/RF												0.00
DF												92.04
IC												0.00
LP												0.00

*Net MBF categories by small-end log DIB's

Appendix B

U.S. Department of the Army Corps of Engineers 404 Permit



DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1398

REPLY TO

DEC 11 2007

Regulatory Branch

SUBJECT: File Number 26733N

Mr. Christopher Longley
Central Federal Lands Highway Division
Federal Highways Administration
Attn: Chris Longley
12300 West Dakota Avenue, Suite 280
Lakewood, CO 80228

Dear Mr. Longley:

This letter is written in response to your submittal of a Pre-Construction Notification/Permit Application dated November 28, 2007, concerning Department of the Army authorization to discharge fill in connection with roadway prism and realignment improvements to the Segment 5 portion (3.82 miles in length) of Hyampom Road between Mile Post 10/KM Station 16+450) and Mile Post 14/KM Station 22+580). The project site is located on Hyampom Road, adjacent to Hayfork Creek, between the communities of Hyampom and Hayfork, in Trinity County, California. The work includes but is not limited to: installation of new culverts, replacement of culverts, culvert extension, rock slope protection placement at culvert outlets and other locations and erosion control work. A total of 0.24 acres of wetlands and other waters of the United States would be impacted by segments 2, 4, and 5 of Hyampom Road Improvement Project. For 2008, Segment 5 would be constructed only. Segments 2 and 4 would be built in subsequent years. Wetland mitigation at a 1.5:1 ratio would be implemented to compensate for project impacts of segments 2, 4 and 5. The Segment 5 project would involve placement of 540 cubic yards of rip-rap, 269 cubic yards of culvert bedding (sand/fine granular material), and 6.6 cubic yards of concrete.

Based on a review of the following information you submitted: *Section 404 Application For Hyampom Road CA PFH 114-1(1), Shasta-Trinity National Forest, Trinity County, CA*, dated November 2007; *California Forest Highway 114, Hyampom Road Hayfork to Hyampom, Trinity County, California Wetland and Mitigation Monitoring Plan*, July 26, 2007; *Biological Assessment California Forest Highway 114, Hyampom Road State Route 3 (Hayfork) to Hyampom, Trinity County, California*, Volume I and Volume II, November 18, 2004; and an inspection of the project site conducted by Corps personnel on February 2, 2004, your project qualifies for authorization under Department of the Army Nationwide Permit 14 Linear Transportation Projects (72 Fed. Reg. 11092, March 12, 2007), pursuant to Section 404 of the Clean Water Act (33 U.S.C. Section 1344). All work shall be completed in accordance with the plans and drawings titled, "U.S. Department of Transportation Federal Highway Administration Central Federal Lands Highway Division, Hyampom Road Segment 5" in fourteen (14) sheets

dated 11-28-07 (Enclosure 1).

The project must be in compliance with the General Conditions cited in Enclosure 2 for this Nationwide Permit authorization to remain valid. Non-compliance with any condition could result in the suspension, modification, or revocation of the authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This Nationwide Permit authorization does not obviate the need to obtain other State or local approvals required by law.

This authorization will remain valid for two years from the date of this letter unless the Nationwide Permit is modified, suspended, or revoked. If you have commenced work or are under contract to commence work prior to the suspension, or revocation of the Nationwide Permit and the project would not comply with the resulting Nationwide Permit authorization, you have twelve (12) months from that date to complete the project under the present terms and conditions of the Nationwide Permit. Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, Enclosure 3, verifying that you have complied with the terms and conditions of the permit.

This authorization will not be effective until you have obtained a Section 401 water quality certification from the California Regional Water Quality Control Board (RWQCB), North Coast Region. If the RWQCB fails to act on a valid request for certification within two (2) months after receipt of a complete application, the Corps will presume that water quality certification has been obtained. You shall submit a copy of the certification to the Corps prior to the commencement of work.


To ensure compliance with this Nationwide Permit authorization, the following special conditions shall be implemented:

1. This Corps permit does not authorize you to take an endangered species. In order to legally take a listed species, you must have a separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit or a Biological Opinion (BO) under ESA Section 7 with "incidental take" provisions with which you must comply). The enclosed Incidental Take Statement (Enclosure 4) from the U.S. Fish and Wildlife Service (FWS) BO dated October 17, 2005 contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take authorized by the attached BO, whose terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take and it would also constitute non-compliance with this Corps permit. The FWS is the appropriate authority to determine compliance with the terms and conditions of its BO and with the ESA.

2. The permittee shall compensate for 0.24 acres of wetlands and other waters of the United States impacted by construction of Segments 2, 4, and 5 by implementing on site (site off Hyampom Road near vicinity of impacted areas) mitigation on a 1.5:1 ratio. The wetland mitigation shall be implemented in accordance with the wetland mitigation plan titled, *California Forest Highway 114, Hyampom Road Hayfork to Hyampom Trinity Count, California Wetland Mitigation and Monitoring Plan*, dated July 26, 2007.
3. The permittee shall ensure that the target acreage of wetlands mitigation would be 0.36 acres. Wetland mitigation and monitoring activity shall be concurrent with project construction. Monitoring of wetland mitigation shall occur for five years after issuance of this permit. The mitigation shall be monitored on an annual basis and monitoring reports shall be submitted to the Corps of Engineers.
4. The permittee shall provide the Corps of Engineers with a final mitigation and monitoring report at end of the five-year monitoring period. The permittee shall include a wetland delineation of the mitigation site to be submitted to the Corps for review. The Corps will then field verify success of the mitigation and confirm the final wetland delineation at the mitigation site.

Should you have any questions regarding this matter, please call David Ammerman of our Eureka Office, Regulatory Branch at 707-443-0855.. Please address all correspondence to the Eureka Office, USACE, Woodley Island, 601 Startare Drive, Eureka, California and refer to the File Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available online at <http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,


Jane M. Hicks
Chief, Regulatory Branch

Enclosures

Copy furnished (w/encl 1 only):

US EPA, San Francisco, CA
US FWS, Arcata, CA
US NMFS, Arcata, CA
CA DFG, Redding, CA
CA RWQCB, Santa Rosa, CA

Ms. Janice Smith
Trinity County Department of Transportation
P.O. Box 2490
Weaverville, CA 96093

Appendix C

CALTRANS Encroachment Permit

ENCROACHMENT PERMIT

TR-0120 (REV. 6/2000)

Permit No.
0207-NBR-0538

In compliance with (Check one):

☒ Your application of **November 8, 2007**☐ Utility Notice No. _____ of _____☐ Agreement No. _____ of _____☐ R/W Contract No. _____ of _____Dist/Co/Rte/PM
02-TRI-3-30.73 LTDate
December 20, 2007

Fee Paid

\$

Deposit

\$ **Exempt**

Performance Bond Amount (1)

\$

Payment Bond Amount (2)

\$

Bond Company

Bond Number (1)

Bond Number (2)

Customer Reference No.

TO:Central Federal Lands Highway Division
12300 West Dakota Avenue
Lakewood CO 80228

Attention: Michael Daigler

Phone: 720-963-3000

, PERMITTEE**and subject to the following, PERMISSION IS HEREBY GRANTED to:**

Install, maintain, and remove when no longer required one construction area sign left of Post Mile 30.73 on State Route 3 near Douglas City in Trinity County per the attached sign details.

PERMITTEE RESPONSIBILITY: It is understood and agreed by the Permittee that utilizing this permit shall constitute an acceptance of the provisions of this Permit and all attachments.**GENERAL SPECIFICATIONS:****NOTIFY STATE'S REPRESENTATIVE:** At least five working days before starting any work (**ten days if any lane closures or traffic control will be necessary**), notify the Caltrans Area Superintendent Milt Apple, telephone 530-623-3628, and Permit Inspector Ken Kubisch, telephone 530-225-3306, P.O. Box 496073, Redding, CA 96049-6073, who will arrange for inspection and approval of the work covered by this permit.

(Continued)

THIS PERMIT IS NOT A PROPERTY RIGHT AND DOES NOT TRANSFER WITH THE PROPERTY TO A NEW OWNER.

The following attachments are also included as part of this permit (Check applicable):

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	General Provisions
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Utility Maintenance Provisions
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Special Provisions Permit Closure Schedule, Sign Details
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	A Cal-OSHA permit, if required: Permit No. _____
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	As-Built Plans Submittal Route Slip for Locally Advertised Projects
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Storm Water Special Provisions

In addition to fee, the permittee will be billed actual costs for:

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Review
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Inspection
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Field Work

(If any Caltrans effort expended)☐ Yes ☒ No The information in the environmental documentation has been reviewed and is considered prior to approval of this permit.This permit is void unless the work is completed before **December 31, 2011**.

This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.

No project work shall be commenced until all other necessary permits and environmental clearances have been obtained.

1 - Permittee
1 - Kubisch
1 - Milt Apple

APPROVED:

BRIAN CRANE, District Director, District 2

BY:

Stacey Barnes
STACEY BARNES, District Permit Engineer, District 2

1 - File

FC

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 653-3657 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

FM 91 1436

Name: Central Federal Lands Highway Division
Permit No.: 0207-NBR-0538
Date: December 20, 2007

STANDARD SPECIFICATIONS AND STANDARD PLANS: Reference to Standard Specifications shall pertain to the State of California Standard Specifications, dated May 2006 including all "Amendments to the May 2006 Standard Specifications", updated October 5, 2007 and located at the following internet web page address: http://www.dot.ca.gov/hq/esc/oe/specifications/SSPs/2006-SSPs/SSPs_HMA/2007-10_updates/S1-020H_E_A10-05-07.doc. Any reference to "Contractor" and "Engineer" in the Standard Specifications is amended to read as "Permittee" and "State's Representative" respectively. Any reference to measurement and payment in the Standard Specifications shall not pertain to this permit. Reference to the Standard Plans shall pertain to the State of California Standard Plans, dated May 2006.

GENERAL PROVISIONS: Permittee's attention is directed to the *General Provisions* attachment of this encroachment permit with special attention to items 13, 14, 15, and 26. In case of conflict between the *General Provisions* and the provisions set forth in this encroachment permit, the encroachment permit provisions shall take precedence over and shall be used in lieu of the *General Provisions*.

FUTURE MOVING OF FACILITIES: Permittee shall, at Permittee's expense, rearrange permitted facilities at the request of the State for construction, reconstruction, or maintenance work on the highway performed by or for the State.

COOPERATION: Attention is directed to Section 7-1.14, "Cooperation," and Section 8-1.10, "Utility and Non-Highway Facilities," of the Standard Specifications. Work allowed by this encroachment permit may conflict with concurrent Caltrans or encroachment permit projects. Permittee shall coordinate all work with State's Representative. Such coordination may result in work delays and/or relocation of the permitted work, the costs of which shall be borne entirely by Permittee.

LIABILITY FOR DAMAGES: Permittee shall be liable for damage to the State highway caused by his operation.

PROTECTION OF SURVEY MONUMENTS: Your attention is directed to Section 7-1.11, "Preservation of Property," of the Standard Specifications and to Section 8771, "Monuments," of the Business and Professions Code. Permittee shall physically inspect the work site and locate survey monuments prior to beginning work. Monuments shall be referenced or reset in accordance with the Business and Professions Code.

TIME EXTENSION: Permittee is advised that any request for time extension shall require a full reevaluation of the original application. Such a reevaluation may conclude with further mitigation, at Permittee's expense, to comply with upgrades in highway design policies.

TERMS OF PERMIT: Any failure on the part of Permittee or his contractor or agent to abide by the terms of this permit or the directions of State's Representative shall be just cause for immediate stoppage of the work and revocation of the permit.

WORK HOURS: No work shall be performed during inclement weather, on weekends, on designated holidays, or after 3:00 P.M. on the day preceding designated holidays, unless specifically authorized or directed by State's Representative. See "TRAFFIC CONTROL" section in this permit for additional time restrictions for work requiring lane closures.

EQUIPMENT ON ROADWAY: All equipment used on the paved surface of the State highway shall be rubber tired or rubber tracked, unless authorized by State's Representative, and shall comply with the legal weight requirements for operation on a State highway.

HUMAN REMAINS: If human remains are uncovered, all work shall immediately stop and Permittee shall immediately notify the local Coroner, as required per Health and Safety Code Section 7050.5, and notify State's Representative.

CONDITION OF WORK SITE: When the permitted work is complete, the area within the State right of way shall be left in a neat and non-erodible condition to the satisfaction of State's Representative. All surplus material and debris shall be disposed of in a lawful manner outside the State right of way.

Name: Central Federal Lands Highway Division
Permit No.: 0207-NBR-0538
Date: December 20, 2007

PUBLIC SAFETY: Permittee shall provide for the safety of traffic and the public in conformance with Section 7-1.09, "Public Safety," of the Standard Specifications and these provisions.

Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the following work areas, Permittee shall close the adjacent traffic lane unless otherwise provided in the Standard Specifications and these special provisions:

Approach Speed of Public Traffic (Posted Limit) (Miles Per Hour)	Work Areas
Over 45	Within 6 feet of a traffic lane but not on a traffic lane
35 to 45	Within 3 feet of a traffic lane but not on a traffic lane

The lane closure provisions of this section shall not apply if permanent or temporary railing or barrier protects the work area.

The approach end of temporary railing (Type K), installed in accordance with the requirements in this section "Public Safety" and in Section 7-1.09, "Public Safety," of the Standard Specifications shall be offset a minimum of 15 feet from the edge of the traffic lane open to public traffic. The temporary railing shall be installed on a skew toward the edge of the traffic lane of not more than one foot transversely to 10 feet longitudinally with respect to the edge of the traffic lane. If the 15-foot minimum offset cannot be achieved, the temporary railing shall be installed on the 10 to 1 skew to obtain the maximum available offset between the approach end of the railing and the edge of the traffic lane, and an array of temporary crash cushion modules shall be installed at the approach end of the temporary railing. Temporary crash cushion modules shall be of sizes, quantity and placement as determined by State's Representative.

Suspended loads or equipment shall not be moved nor positioned over public traffic or pedestrians.

PROSECUTION OF WORK: Once work authorized by this permit is begun, it shall be diligently prosecuted to completion. Should suspension of work be necessary for any reason, trenches and excavations shall be closed (backfilled and compacted), and the area graded, obstructions removed, and erosion control measures installed to the satisfaction of State's Representative.

WATER POLLUTION PREVENTION: The California State Water Resources Control Board (SWRCB) has adopted the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (Order No. 99-08-DWQ, NPDES Permit CAS000002) (hereafter called General Permit) and the NPDES Permit for Storm Water Discharges from Caltrans Properties, Facilities and Activities (Order No. 99-06-DWQ, NPDES No. CAS000003) (hereafter called Caltrans Permit). The goal of those permits is to prevent the discharge of pollutants associated with construction activity from entering surface and underground waters of the State. Permittee shall comply with all applicable requirements of those NPDES permits.

MITIGATION AND MONITORING: Permittee shall be responsible for ensuring that all mitigation and monitoring requirements, as proposed in the lead agency's environmental document, are fulfilled and that all regulatory agency coordination and permit requirements are completed prior to beginning construction.

COPY OF PERMIT ON SITE: A copy of this encroachment permit shall be kept at the project site at all times.

AS-BUILT PLANS: After completion of the permitted work and prior to acceptance by Caltrans, Permittee shall submit standard unit (US) as-built plans to the Caltrans District 2 Permit office. As-built plans shall be tied to points that are compatible with the Caltrans datum for the area. If no datum exists, permanent reference points shall be set that can be used to accurately locate the facilities. A responsible member of Permittee's staff shall sign the as-built plans.

COMPLETION OF WORK: After completion of the authorized work, Permittee shall immediately complete and mail the attached *Notice of Completion* postal card.

Name: Central Federal Lands Highway Division
Permit No.: 0207-NBR-0538
Date: December 20, 2007

MAINTENANCE OF FACILITIES:

MAINTENANCE OF FACILITIES: Permittee shall, at Permittee's expense, maintain any facilities constructed or permitted under this encroachment permit.

UTILITIES:

CONFLICTS WITH UTILITIES: Permittee shall be responsible for the relocation or adjustment of any utility required as the result of work authorized by this permit. If existing public or private utilities conflict with the construction of project, permittee will make necessary arrangements with the owners of such utilities for their protection, relocation or removal of such facilities. Total costs for such protection, relocation or removal shall be borne by permittee in compliance with the terms of the Highway Encroachment Permits, Case Law, Public Utility Regulations and Property Rights. Permittee shall require any utility company performing relocation in the State's right of way to obtain a State Encroachment Permit prior to the performance of said relocation work.

NOTIFICATION OF U.S.A.: Permittee shall call Underground Service Alert at least two working days prior to performing any excavation deeper than one-foot or other work close to any underground pipeline, conduit, duct, wire, or other structure. The regional notification center phone number is 1-800-642-2444.

NOTIFICATION OF CALTRANS: Caltrans is not part of USA Underground Locate; therefore, prior to beginning any work, Caltrans electrical supervisor Jon Miller, shall be notified at 530-225-3469 to locate electrical connections, and Bill Belcher at 530-225-3313 to locate all underground count stations.

TRAFFIC CONTROL:

TRAFFIC CONTROL SYSTEMS: No lane closures are authorized under this permit.

SHOULDER CLOSURES: Whenever vehicles or equipment are parked on the shoulder within 6 feet of a traffic lane, the shoulder area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of traveled way (fog line) at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of 9 cones or portable delineators shall be used for the taper. A W20-1 (Road Work Ahead) or W21-5 (Shoulder Work) sign shall be mounted on a telescoping flag tree with flags. The flag tree shall be placed where directed by the Engineer. Should State's Representative observe any deviation from these plans, all work will be suspended until satisfactory steps have been taken to ensure compliance. Shoulder closures shall not be placed during inclement weather or when the roadway is icy or frozen.

ADVANCE NOTIFICATION FOR SHOULDER CLOSURES: By noon Monday, Permittee shall submit a schedule of planned lane and shoulder closures for the following week period, defined as Saturday through the following Friday. If Monday is a designated holiday, the schedule shall be delivered on Tuesday. Permittee shall submit a completed copy of the attached *Permit Closure Schedules* form by fax to the Caltrans District 2 Encroachment Permit office at fax number (530) 225-3097. If a fax is unavailable, the schedule may be called in by voice telephone at (530) 225-3400.

NOTIFICATION FOR SHOULDER CLOSURES: Permittee shall notify the Caltrans District 2 Encroachment Permit office by telephone at (530) 225-3400 at the time a lane or shoulder closure is installed, and again when the closure has ended. Permittee shall provide the following information; Permittee's name, encroachment permit number, location (county, route and post mile limits), direction of closure (e.g., southbound, eastbound, full road), and the time when installing or ending the closure. For weekends and after hours, Permittee shall leave a message at the above telephone number, with the details as indicated. **Permittee shall also notify Encroachment Permits office if a scheduled closure is cancelled. Permittee MUST call to report status each day a closure has been requested.**

Name: Central Federal Lands Highway Division
Permit No.: 0207-NBR-0538
Date: December 20, 2007

CONSTRUCTION AREA SIGN:

CONSTRUCTION AREA SIGN: Signs that are no longer required or that convey inaccurate information to the public shall be immediately covered or removed, or the information shall be corrected. Covers for construction area signs shall be of sufficient size and density to completely block out the complete face of the sign. The retroreflective face of the covered sign shall not be visible either during the day or at night. Covers shall be fastened securely so that the signs remain covered during inclement weather. Covers shall be replaced when they no longer cover the sign properly.

SIZE, LETTERING, AND MOUNTING: Signs shall conform to the attached sign details.

BOTTOM CLEARANCE: Bottom of signs shall be 5 feet above the highway surface.

OBSTRUCTION OF OTHER SIGNS: The proposed signs shall not obstruct the view of existing signs.

MAINTENANCE: Permittee shall be responsible for all future maintenance and upkeep of the signs and ground area immediately adjacent thereto.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
NOTICE OF COMPLETION
TR-0128 (REV 06/01) CT #7541-5529-1

0207-NBR-0538

PERMIT NO.

02-TR1-3-30.73 CT

LOCATION

All work authorized by the above-numbered permit was
completed on _____

Insert Date

SIGNATURE OF PERMITTEE

Central Federal Lands Highway Div

**ADA
Notice**

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916)654-6410 or TDD (916) 654-3880 or write Records and Forms management, 1120 N Street, MS-89, Sacramento, CA 95814

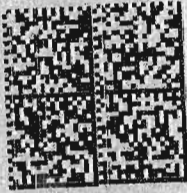
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Encroachment Permits Office
State of California
Department of Transportation
PO Box 496073
Redding, CA 96049-6073

1. **AUTHORITY:** The Department's authority to issue encroachment permits is provided under, Div. 1, Chpt. 3, Art. 1, Sect. 660 to 734 of the Streets and Highways Code.
2. **REVOCATION:** Encroachment permits are revocable on five days notice unless otherwise stated on the permit and except as provided by law for public corporations, franchise holders, and utilities. These General Provisions and the Encroachment Permit Utility Provisions are subject to modification or abrogation at any time. Permittees' joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State highway right of way are exceptions to this revocation.
3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay permit fees when due can result in rejection of future applications and denial of permits.
4. **ASSIGNMENT:** No party other than the permittee or permittee's authorized agent is allowed to work under this permit.
5. **ACCEPTANCE OF PROVISIONS:** Permittee understands and agrees to accept these General Provisions and all attachments to this permit, for any work to be performed under this permit.
6. **BEGINNING OF WORK:** When traffic is not impacted (see Number 35), the permittee shall notify the Department's representative, two (2) days before the intent to start permitted work. Permittee shall notify the Department's Representative if the work is to be interrupted for a period of five (5) days or more, unless otherwise agreed upon. All work shall be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this permit.
7. **STANDARDS OF CONSTRUCTION:** All work performed within highway right of way shall conform to recognized construction standards and current Department Standard Specifications, Department Standard Plans High and Low Risk Facility Specifications, and Utility Special Provisions. Where reference is made to "Contractor and Engineer," these are amended to be read as "Permittee and Department representative."
8. **PLAN CHANGES:** Changes to plans, specifications, and permit provisions are not allowed without prior approval from the State representative.
9. **INSPECTION AND APPROVAL:** All work is subject to monitoring and inspection. Upon completion of work, permittee shall request a final inspection for acceptance and approval by the Department. The local agency permittee shall not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.
10. **PERMIT AT WORKSITE:** Permittee shall keep the permit package or a copy thereof, at the work site and show it upon request to any Department representative or law enforcement officer. If the permit package is not kept and made available at the work site, the work shall be suspended.
11. **CONFLICTING ENCROACHMENTS:** Permittee shall yield start of work to ongoing, prior authorized, work adjacent to or within the limits of the project site. When existing encroachments conflict with new work, the permittee shall bear all cost for rearrangements, (e.g., relocation, alteration, removal, etc.).
12. **PERMITS FROM OTHER AGENCIES:** This permit is invalidated if the permittee has not obtained all permits necessary and required by law, from the Public Utilities Commission of the State of California (PUC), California Occupational Safety and Health Administration (Cal-OSHA), or any other public agency having jurisdiction.
13. **PEDESTRIAN AND BICYCLIST SAFETY:** A safe minimum passageway of 4' shall be maintained through the work area at existing pedestrian or bicycle facilities. At no time shall pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades shall be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street. Attention is directed to Section 7-1.09 Public Safety of the Department Standard Specifications.
14. **PUBLIC TRAFFIC CONTROL:** As required by law, the permittee shall provide traffic control protection warning signs, lights, safety devices, etc., and take all other measures necessary for traveling public's safety. While providing traffic control, the needs and control of all road users [motorists, bicyclists and pedestrians, including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA)] shall be an essential part of the work activity.

Day and night time lane closures shall comply with the California Manual on Uniform Traffic Control Devices (Part 6, Temporary Traffic Control), Standard Plans, and Standard Specifications for traffic control systems. These General Provisions are not intended to impose upon the permittee, by third parties, any duty or standard of care, greater than or different from, as required by law.
15. **MINIMUM INTERFERENCE WITH TRAFFIC:** Permittee shall plan and conduct work so as to create the least possible inconvenience to the traveling public; traffic shall not be unreasonably delayed. On conventional highways, permittee shall place properly attired flagger(s) to stop or warn the traveling public in compliance with the California Manual on Uniform Traffic Control Devices (Chapter 6E, Flagger Control).
16. **STORAGE OF EQUIPMENT AND MATERIALS:** The storage of equipment or materials is not allowed within State highway right-of-way, unless specified within the Special Provisions of this specific encroachment permit. If Encroachment Permit Special Provisions allow for the storage of equipment or materials within the State right of way, the equipment and material storage shall comply with Standard Specifications, Standard Plans, Special Provisions, and the Highway Design Manual. The clear recovery zone widths must be followed and are the minimum desirable for the type of facility indicated below: freeways and expressways - 30', conventional highways (no curbs) - 20', conventional highways (with curbs) - 1.5'. If a fixed object cannot be eliminated, moved outside the clear recovery zone, or modified to be made yielding, it should be shielded by a guardrail or a crash cushion.
17. **CARE OF DRAINAGE:** Permittee shall provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Standard Specifications, Standard Plans and/or as directed by the Department's representative.
18. **RESTORATION AND REPAIRS IN RIGHT OF WAY:** Permittee is responsible for restoration and repair of State highway right of way resulting from permitted work (State Streets and Highways Code, Sections 670 et. seq.).

activity is being performed under the obligations provided by and contemplated by the permit, except as otherwise provided by statute.

The duty of the permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code. The permittee waives any and all rights to any type of expressed or implied indemnity against the State, its officers, employees, and State contractors. It is the intent of the parties that the permittee will indemnify and hold harmless the State, its officers, employees, and State's contractors, from any and all claims, suits or actions as set forth above regardless of the existence or degree of fault or negligence, whether active or passive, primary or secondary, on the part of the State, the permittee, persons employed by the permittee, or acting on behalf of the permittee.

For the purpose of this section, "State's contractors" shall include contractors and their subcontractors under contract to the State of California performing work within the limits of this permit.

29. **NO PRECEDENT ESTABLISHED:** This permit is issued with the understanding that it does not establish a precedent.

30. **FEDERAL CIVIL RIGHTS REQUIREMENTS FOR PUBLIC ACCOMMODATION:**

A. The permittee, for himself, his personal representative, successors in interest, and assigns as part of the consideration hereof, does hereby covenant and agree that:

1. No person on the grounds of race, color, or national origin shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
2. That in connection with the construction of any improvements on said lands and the furnishings of services thereon, no discrimination shall be practiced in the selection and retention of first-tier subcontractors in the selection of second-tier subcontractors.
3. That such discrimination shall not be practiced against the public in their access to and use of the facilities and services provided for public accommodations (such as eating, sleeping, rest, recreation), and operation on, over, or under the space of the right of way.
4. That the permittee shall use the premises in compliance with all other requirements imposed pursuant to Title 15, Code of Federal Regulations, Commerce and Foreign Trade, Subtitle A. Office of the Secretary of Commerce, Part 8 (15 C.F.R. Part 8) and as said Regulations may be amended.
5. That in the event of breach of any of the above nondiscrimination covenants, the State shall have the right to terminate the permit and to re-enter and repossess said land and the land and the facilities thereon, and hold the same as if said permit had never been made or issued.

31. **MAINTENANCE OF HIGHWAYS:** The permittee agrees, by acceptance of a permit, to properly maintain any encroachment. This assurance requires the permittee to provide inspection and repair any damage, at permittee's expense, to State facilities resulting from the encroachment.

32. **SPECIAL EVENTS:** In accordance with subdivision (a) of Streets and Highways Code Section 682.5, the Department of Transportation shall not be responsible for the conduct or operation of the permitted activity, and the applicant agrees to defend, indemnify, and hold harmless the State and the city or county against any and all claims arising out of any activity for which the permit is issued.

Permittee understands and agrees that it will comply with the obligations of Titles II and III of the Americans with Disabilities Act of 1990 in the conduct of the event, and further agrees to indemnify and save harmless the State of California, all officers and employees thereof, including but not limited to the Director of Transportation, from any claims or liability arising out of or by virtue of said Act.

33. **PRIVATE USE OF RIGHT OF WAY:** Highway right of way shall not be used for private purposes without compensation to the State. The gifting of public property use and therefore public funds is prohibited under the California Constitution, Article 16.

34. **FIELD WORK REIMBURSEMENT:** Permittee shall reimburse State for field work performed on permittee's behalf to correct or remedy hazards or damaged facilities, or clear debris not attended to by the permittee.

35. **NOTIFICATION OF DEPARTMENT AND TMC:** The permittee shall notify the Department's representative and the Transportation Management Center (TMC) at least 7 days before initiating a lane closure or conducting an activity that may cause a traffic impact. A confirmation notification should occur 3 days before closure or other potential traffic impacts. In emergency situations when the corrective work or the emergency itself may affect traffic, TMC and the Department's representative shall be notified as soon as possible.

36. **SUSPENSION OF TRAFFIC CONTROL OPERATION:** The permittee, upon notification by the Department's representative, shall immediately suspend all lane closure operations and any operation that impedes the flow of traffic. All costs associated with this suspension shall be borne by the permittee.

37. **UNDERGROUND SERVICE ALERT (USA) NOTIFICATION:** Any excavation requires compliance with the provisions of Government Code Section 4216 et. seq., including, but not limited to notice to a regional notification center, such as Underground Service Alert (USA). The permittee shall provide notification at least 48 hours before performing any excavation work within the right of way.

19. **RIGHT OF WAY CLEAN UP:** Upon completion of work, permittee shall remove and dispose of all scraps, brush, timber, materials, etc. off the right of way. The aesthetics of the highway shall be as it was before work started.
20. **COST OF WORK:** Unless stated in the permit, or a separate written agreement, the permittee shall bear all costs incurred for work within the State right of way and waives all claims for indemnification or contribution from the State.
21. **ACTUAL COST BILLING:** When specified in the permit, the Department will bill the permittee actual costs at the currently set hourly rate for encroachment permits.
22. **AS-BUILT PLANS:** When required, permittee shall submit one (1) set of folded as-built plans within thirty (30) days after completion and approval of work in compliance with requirements listed as follows:
1. Upon completion of the work provided herein, the permittee shall send one vellum or paper set of As-Built plans, to the State representative. Mylar or paper sepia plans are not acceptable.
 2. All changes in the work will be shown on the plans, as issued with the permit, including changes approved by Encroachment Permit Rider.
 3. The plans are to be stamped or otherwise noted AS-BUILT by the permittee's representative who was responsible for overseeing the work. Any original plan that was approved with a State stamp, or Caltrans representative signature, shall be used for producing the As-Built plans.
 4. If As-Built plans include signing or striping, the dates of signing or striping removal, relocation, or installation shall be shown on the plans when required as a condition of the permit. When the construction plans show signing and striping for staged construction on separate sheets, the sheet for each stage shall show the removal, relocation or installation dates of the appropriate staged striping and signing.
 5. As-Built plans shall contain the Permit Number, County, Route, and Post Mile on each sheet.
 6. Disclaimer statement of any kind that differ from the obligations and protections provided by Sections 6735 through 6735.6 of the California Business and Professions Code, shall not be included on the As-Built plans. Such statements constitute non-compliance with Encroachment Permit requirements, and may result in the Department of Transportation retaining Performance Bonds or deposits until proper plans are submitted. Failure to comply may also result in denial of future permits, or a provision requiring a public agency to supply additional bonding.
23. **PERMITS FOR RECORD PURPOSES ONLY:** When work in the right of way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt permit is issued to the permittee for the purpose of providing a notice and record of work. The Permittee's prior rights shall be preserved without the intention of creating new or different rights or obligations. "Notice and Record Purposes Only" shall be stamped across the face of the permit.
24. **BONDING:** The permittee shall file bond(s), in advance, in the amount set by the Department. Failure to maintain bond(s) in full force and effect will result in the Department stopping of all work and revoking permit(s). Bonds are not required of public corporations or privately owned utilities, unless permittee failed to comply with the provision and conditions under a prior permit. The surety company is responsible for any latent defects as provided in California Code of Civil Procedures, Section 337.15. Local agency permittee shall comply with requirements established as follows: In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local agency permittee agrees to require the construction contractor furnish both a payment and performance bond in the local agency's name with both bonds complying with the requirements set forth in Section 3-1.02 of State's current Standard Specifications before performing any project construction work. The local agency permittee shall defend, indemnify, and hold harmless the State, its officers and employees from all project construction related claims by contractors and all stop notice or mechanic's lien claimants. The local agency also agrees to remedy, in a timely manner and to State's satisfaction, any latent defects occurring as a result of the project construction work.
25. **FUTURE MOVING OF INSTALLATIONS:** Permittee understands and agrees to rearrange a permitted installation upon request by the Department, for State construction, reconstruction, or maintenance work on the highway. The permittee at his sole expense, unless under a prior agreement, JUA, or a CCUA, shall comply with said request.
26. **ARCHAEOLOGICAL/HISTORICAL:** If any archaeological or historical resources are revealed in the work vicinity, the permittee shall immediately stop work, notify the Department's representative, retain a qualified archaeologist who shall evaluate the site, and make recommendations to the Department representative regarding the continuance of work.
27. **PREVAILING WAGES:** Work performed by or under a permit may require permittee's contractors and subcontractors to pay appropriate prevailing wages as set by the Department of Industrial Relations. Inquiries or requests for interpretations relative to enforcement of prevailing wage requirements are directed to State of California Department of Industrial Relations, 525 Golden Gate Avenue, San Francisco, California 94102.
28. **RESPONSIBILITY FOR DAMAGE:** The State of California and all officers and employees thereof, including but not limited to the Director of Transportation and the Deputy Director, shall not be answerable or accountable in any manner for injury to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee, or for damage to property from any cause. The permittee shall be responsible for any liability imposed by law and for injuries to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee, or for damage to property arising out of work, or other activity permitted and done by the permittee under a permit, or arising out of the failure on the permittee's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time, work or other activity is being performed under the obligations provided by and contemplated by the permit.
- The permittee shall indemnify and save harmless the State of California, all officers, employees, and State's contractors, thereof, including but not limited to the Director of Transportation and the Deputy Director, from all claims, suits or actions of every name, kind and description brought for or on account of injuries to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee and the public, or damage to property resulting from the performance of work or other activity under the permit, or arising out of the failure on the permittee's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time, work or other

PERMIT CLOSURE SCHEDULES

A written schedule of all lane closures is to be submitted to the Encroachment Permits Office by:

Phone #: (530) 225-3400 or Fax #: (530) 225-3097

-SUBMIT BEFORE NOON MONDAY -

For the week period beginning the FOLLOWING Saturday through Friday.

Permit Inspector Name _____



District 02

Date:

Permittee/Contractor:

Phone Number:

Permit No:

County:

Route(s):

Post Mile(s):

Work Description:

☐ Utility ☐ Widening ☐ Overlay ☐ Realignment ☐ Drainage ☐ Structure
☐ Traffic Signal/Lighting ☐ Landscape ☐ Slope Repair ☐ Road Connection
☐ Other:

Lane Closures: ☐ Freeway ☐ Expressway ☐ Conventional

#1 ☐ NB ☐ SB ☐ EB ☐ WB Description:

#2 ☐ NB ☐ SB ☐ EB ☐ WB Description:

#3 ☐ NB ☐ SB ☐ EB ☐ WB Description:

Facility Closure: ☐ Rest Area ☐ Truck Scale

Vertical & Horizontal Reductions:

Reduced Lane Width = Reduced Vertical Clearance =

Ramp Closures: ☐ Yes ☐ No
If Yes, describe work, date and time of closure

Date Public Affairs Office notified _____
Date public notification signing placed at ramp _____
(7-14 days in advance of closure)

Detour Available: ☐ YES ☐ NO
If Yes, attach detour route plan.

Authorization to use county or city roads for detour: ☐ YES ☐ NO

Date Work Begins:

Date Work Ends:

Geographic Location Public Can Relate To:

Type of Work Performed:

Length of Delay:

Days of the Week:

Hours of Actual Work:

Type of Traffic Control/Restriction (check all that apply):

Standard Plans: ☐ T10 ☐ T10A ☐ T11 ☐ T12 ☐ T13 ☐ T14 ☐ T15 ☐ T16
☐ T17 ☐ T10 Shoulder Closure ☐ Temp. Signals ☐ Pilot Car ☐ Stop,
Proceed When Clear ☐ Changeable Message Signs ☐ Radar Trailer ☐ HAR
☐ COZEEP ☐ Speed Reduction ☐ CHP Traffic Break ☐ Other:

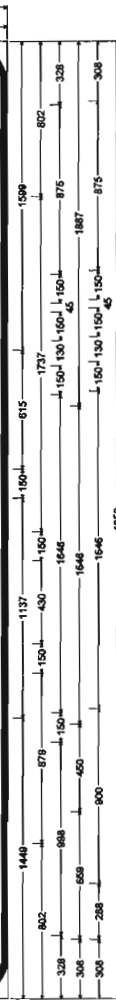
HYAMPOM ROAD

CLOSED FOR CONSTRUCTION

Mon-Wed 7:30am-11:30am & 1pm-4pm

Thurs 7:30am-11:30am

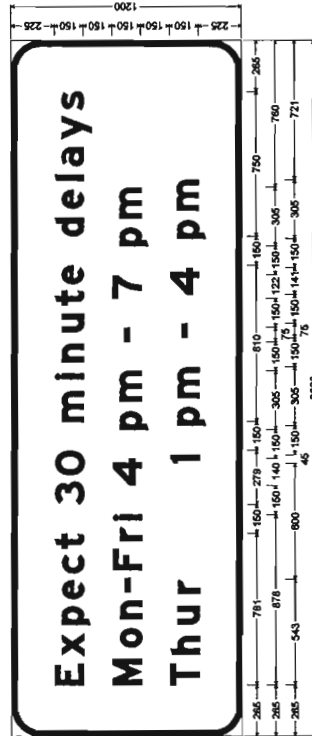
Fri 7:30am-11:30am & 1pm-4pm



225mm Radius, 38mm Border, White on Orange.
[YAMPOM ROAD 1] E Mod; [CLOSED FOR CONSTRUCTION] E Mod; [Mon-Wed 7:30am-11:30am & 1 pm-4pm] E Mod; [Thurs 7:30am-11:30am] E Mod; [Fri 7:30am-11:30am & 1 pm-4pm] E Mod; [Sat 7:30am-11:30am] E Mod.

TEMPORARY TRAFFIC CONSTRUCTION SIGN "SPECIAL A"

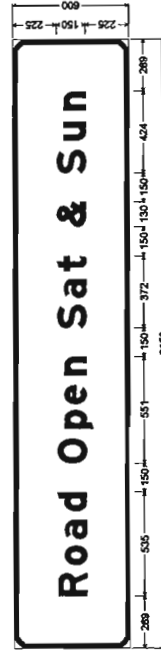
Expect 30 minute delays
Mon-Fri 4 pm - 7 pm
Thur 1 pm - 4 pm



152mm Radius, 32mm Border, White on Orange;
E Mod: [Mon-Eri 4 cm - 7 cm] E Mod: [Thur 1 cm - 4 cm] E Mod:

TEMPORARY TRAFFIC CONSTRUCTION SIGN "SPECIAL B"

Road Open Sat & Sun



76mm Radius, 25mm Border, Whites on Orange;
[Road Open Sat & Sun] E Mod:

TEMPORARY TRAFFIC CONSTRUCTION SIGN "SPECIAL C"

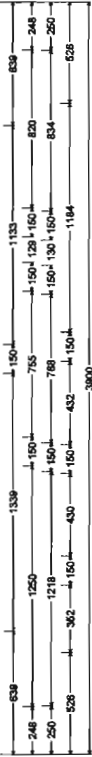
HYAMPOM ROAD

SCHEDULED OPENINGS

Westbound 1130am & 1230pm

Eastbound 1145am & 1245pm

For Info Call 555-5555



Open: 25mm Radius, 38mm Border, White on Orange;
[HYAMPOM ROAD] E Mod; [SCHEDULED OPENINGS] E Mod; [Westbound 11:30am & 12:30pm] E Mod;
[Eastbound 11:45am & 12:45pm] E Mod; [For Info Call 665-5555] E Mod;

TEMPORARY TRAFFIC CONSTRUCTION SIGN "SPECIAL-D"

Notes:

1. Install signs "Special A", "Special B" and "Special C" on same posts.
2. Dimensions of sign panels shown are the maximum allowed.
3. Final wording of message will be approved by the CO.
4. See Special M633-B for sign post details.

No Scale

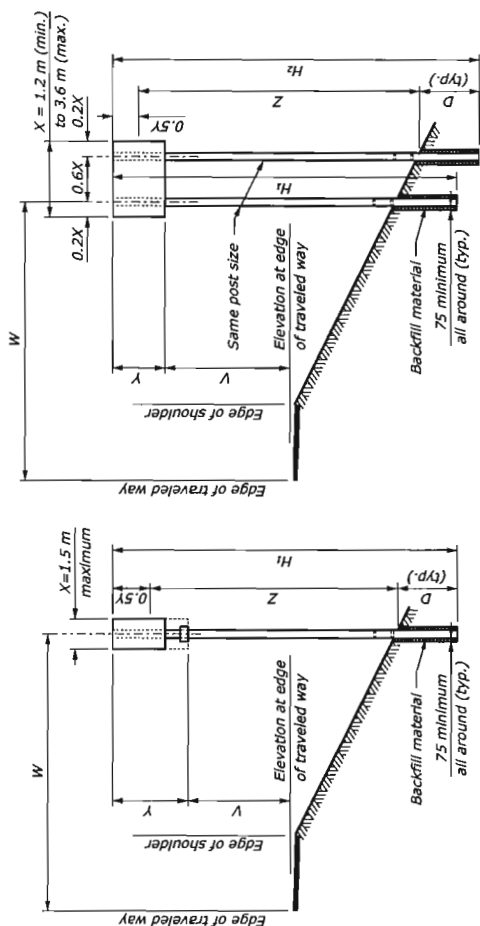
SPECIAL
M635-B

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

METRIC SPECIAL
TEMPORARY TRAFFIC
SPECIAL
CONSTRUCTION SIGN

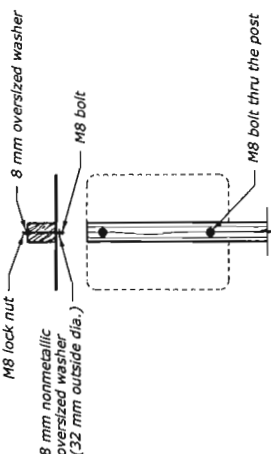
Saw cut notch full width of post. Omit notch for single post installations

Notch depth (where required)
(See Post Selection table)



TWO POST SIGNS

SINGLE POST SIGNS



TYPICAL MOUNTING FOR SIGNS WITHOUT ANGLES

WOOD POST SELECTION TABLE						
POST SIZE (mm)	NUMBER OF POSTS				D (m)	Notch depth and hole diameter
	1	2	3	4		
	Product of X-Y-Z (m ³)					
100 x 100	2.2	4.3	6.6	18.7	0.9	-
100 x 150	5.0	10.8	15.3	20.3	1.2	45 mm
150 x 150	6.6	13.3	19.9	26.6	1.2	45 mm
150 x 200	8.4	23.8	35.8	47.6	1.2	65 mm
150 x 250	10.8	33.0	49.6	66.1	1.5	-
200 x 250	16.1	45.1	67.5	90.9	1.5	-
200 x 300	21.7	64.7	97.0	129.4	1.8	-

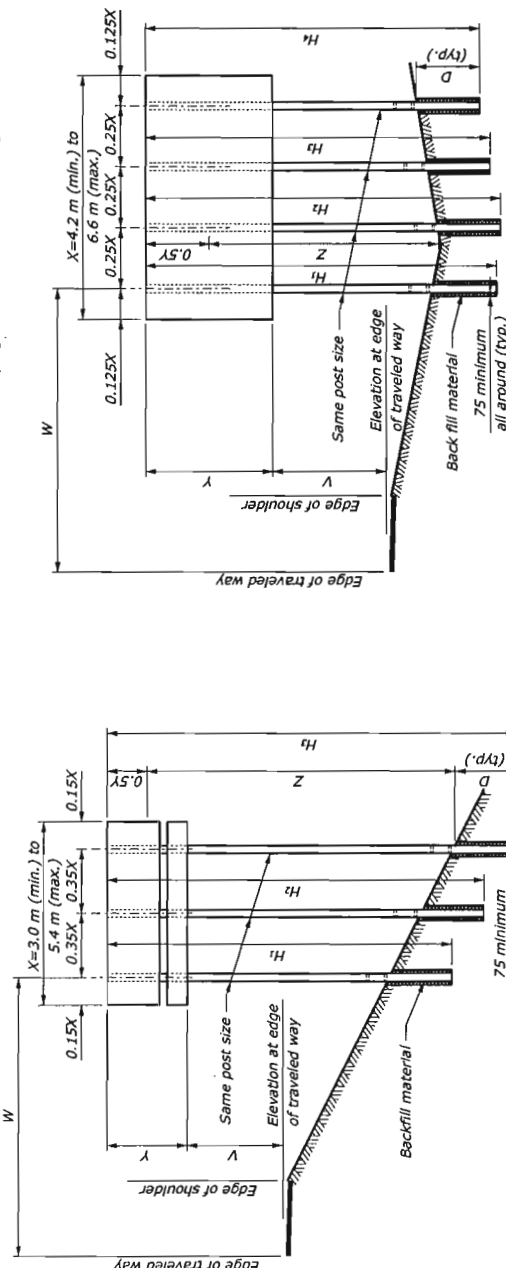
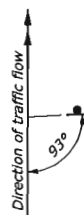
Values shown are the maximum permitted. If the product of XYZ exceeds the limit for the largest post, use steel post installation.

MINIMUM DISTANCE TO SIGN		
Location	Lateral Offset (W)	Mounting Height (V)
Rural Districts	1.8 m	1.5 m
Business or Residence Districts	0.6 m from curb	2.1 m

/ may be reduced by 0.3 m in rural districts for a secondary sign mounted below another sign.

SIGN INSTALLATION ANGLE

For all retroreflectorized signs where $W > 7.5$ m



THREE POST SIGNS

FOUR POST SIGNS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

**METRIC SPECIAL
PERMANENT SIGN
INSTALLATION
WOOD POSTS**

SPECIAL
1633-B

STORM WATER SPECIAL PROVISIONS FOR MINIMAL OR NO IMPACT

TR-0170 (Rev. 06/2004)

- 1. NPDES REQUIREMENTS:** Permittee shall be responsible for full compliance with the Caltrans Storm Water Program and the Caltrans NPDES permit requirements. For additional information, visit the Caltrans Stormwater Website at <http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm>
- 2. RESPONSIBILITY FOR DEBRIS:** Permittee shall be responsible for preventing all dirt, trash, debris and other construction waste from entering storm drains, local creeks, or other bodies of water.
- 3. VEHICLES AT THE WORK SITE:** Permittee shall prevent all vehicles, equipment, etc. from leakage or mud tracking onto roadways.
- 4. VEHICLE FUEL AT THE WORKSITE:** Permittee equipment fueling and maintenance activities shall not result in any pollution at the job site.
- 5. CLEANING VEHICLES AT WORKSITE:** Permittee shall clean all equipment with clean water only in a bermed area or over a drip pan large enough to prevent run-off. No soaps, solvents, degreasers, etc shall be used in State right of way. Any water from this operation shall be collected and disposed of at an appropriate site.
- 6. WEATHER CONDITIONS AT WORKSITE:** All paving, painting, grinding, and saw-cutting operations shall be performed during dry weather.
- 7. FRESH AC:** Fresh AC shall not be washed.
- 8. PROTECTION OF DRAINAGE:** Permittee shall protect/cover gutters, ditches, drainage courses, and inlets with sand/gravel bags, fiber rolls, etc., to the satisfaction of the State representative during paving operations, saw-cutting, etc.
- 9. SAW CUTTING:** No dry saw-cutting shall be allowed.
- 10. SPOILS & RESIDUE:** Permittee shall vacuum or sweep any saw-cut spoils, debris, residue, etc. No spoils, debris, residue, etc. shall be washed into a drainage system.
- 11. PAINT:** Rinsing of paintbrushes or materials is not permitted in state right-of-way. Oil based paint sludge and unusable thinner shall be disposed of at an approved hazardous waste site.
- 12. GROUT & MORTAR:** All construction materials including concrete, grout, cement containing premixes and mortar shall be stored under cover and separated away from drainage areas. Stored materials shall not reach a storm drain.
- 13. CONCRETE EQUIPMENT/VEHICLES:** Concrete equipment/trucks shall be washed out off of State right of way or in a designated washing area as required by Caltrans Standards.
- 14. SOIL DISTURBANCE:** Soil disturbing activities shall be avoided during the rainy season. If grading activities during wet weather are allowed in your permit, all control measures necessary to prevent erosion shall be implemented.
- 15. EXISTING VEGETATION:** Mature vegetation is the best form of erosion control. Disturbance to existing vegetation shall be minimized whenever possible.
- 16. SLOPES:** In cases where slopes are disturbed during construction, soil shall be secured with erosion control and soil stabilization measures. Fiber rolls shall be placed downslope until the soil is secure.
- 17. CATCH BASINS:** Sand, dirt, and similar materials shall be stored at least 3-meters (10-feet) from catch basins and covered with a tarp during wet weather or when rain is forecast.
- 18. SWEEPING:** Roadways and other paved areas shall be swept daily. Roadways or work areas shall not be washed down with water.
- 19. CONTAMINATED WATER:** The State representative shall be notified in case any unusual discoloration, odor, texture in ground water, in excavated material or abandoned underground tanks, pipes, or buried debris are encountered.
- 20. DIESEL FUELS:** Use of diesel as a form-oil shall not be Permitted.
- 21. DEWATERING:** Any effluent discharged into any storm water system requires a waste discharge permit from the Regional Water Quality Control Board. The permittee shall provide the State Representative with a copy of the Waste Discharge Permit.

Appendix D

NPDES Permit



State Water Resources Control Board



Linda S. Adams
Secretary for
Environmental
Protection

Division of Water Quality
1001 I Street o Sacramento, California 95814 o (916) 341-5536
Mailing Address: P.O. Box 1977 o Sacramento, California o 95812-
1977
FAX (916) 341-5543 o Internet Address:
<http://www.waterboards.ca.gov>
Email Address: stormwater@waterboards.ca.gov

**Arnold
Schwarzenegger**
Governor

Approved Date: 01/08/2008

Donna Harmon
USDA Forest Service
PO Box 159
Hayfork, CA 96041

RECEIPT OF YOUR NOTICE OF INTENT (NOI)

The State Water Resources Control Board (State Water Board) has received and processed your NOI to comply with the terms of the General Permit for Storm Water Discharges Associated with Construction Activity. Accordingly, you are required to comply with the permit requirements.

The Waste Discharger Identification (WDID) number is: **1 53C350330** .
Please use this number in any future communications regarding this permit.

SITE DESCRIPTION

OWNER: USDA Forest Service
DEVELOPER: Fed Hwy Admin Central Federal Lands Hwy Division
SITE INFORMATION: Hyampom Road CA PFH 114 1
SITE LOCATION: Hyampom Rd btwn Hyampom CA Hyampom, CA 96046
COUNTY: Trinity
TOTAL DISTRUBED ACRES: 31.5
START DATE: 03/26/2008
COMPLETION DATE: 03/26/2011

When construction is complete or ownership is transferred, **dischargers are required to submit a Notice of Termination (NOT)** to the local Regional Water Board. All State and local requirements must be met in accordance with Special Provision No. 7 of the General Permit. If you do not submit a NOT when construction activity is completed you will continue and are responsible to pay the annual fee invoiced each January.

If you have any questions regarding permit requirements, please contact your Regional Water Board at **(707) 576-2220**. Please visit the storm water web page at www.waterboards.ca.gov/stormwtr/index.html to obtain an NOT and other storm water related information and forms.

Sincerely,

Storm Water Section

Division of Water Quality

California Environmental Protection Agency

Appendix A

Timber Sale Contract & Appraisal Summary

UNITED STATES DEPARTMENT OF AGRICULTURE
Forest Service

TIMBER SALE CONTRACT
DIVISION BT

June 2006
(Date of Issue)

STANDARD PROVISIONS FOR TIMBER SALES TO BE MEASURED BEFORE FELLING

This Division is organized into Parts, Sections, Subsections, and Items. These are numbered in accordance with the following scheme: Part BT1.0, Section BT1.1, Subsection BT1.11, and Item BT1.111. References to a Part include all Sections, Subsections, and Items within that Part; references to a Section include all Subsections and Items within that Section; and references to a Subsection include all Items within that Subsection. Cross-references within this contract cite the reference number of the applicable Division, Part, Section, Subsection, and Item. Descriptive headings used

are not to be considered in determining the rights and obligations of the parties.

The Standard Provisions in this Division are subject to Specific Conditions of the contract stated in Division AT. Wherever appropriate, Specific Conditions established in Division AT are cited by reference number. The listing of Sections, Subsections, or Items of this Division in AT18 has the effect of striking or deleting them from Division BT. AT19 lists Special Provisions that comprise Division CT. Where appropriate, references to Special Provisions are made by citing the applicable reference numbers.

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Bid Rates	AT4	Payment Unit	BT4.1
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BT1.0—SALE AREA

BT1.1 Sale Area Map. The boundaries of “Sale Area” and any Payment Unit thereof, are as shown on the attached “Sale Area Map” that is made a part hereof, and were, before timber sale advertisement, designated on the ground by Forest Service to meet the anticipated needs of the parties. The location of Sale Area and its approximate acreage are stated in AT1. Payment Units may be revised and additional ones may be established only by written agreement. Upon Purchaser’s request, Forest Service shall subdivide Payment Units to reduce them to a size that can be logged within 60 days at Purchaser’s normal rate of logging. However, the rate of logging used in such adjustment of Payment Unit size shall not be less than a rate necessary for removal of all Included Timber during Normal Operating Seasons prior to Termination Date. Payment Units or cutting units may be eliminated from Sale Area under conditions described in BT6.36. Catastrophically Damaged areas may be removed from Sale Area under BT8.32.

Where applicable, the following are also identified on Sale Area Map:

- (a) Identified claims limiting Purchaser’s rights under BT1.2;
- (b) Payment Units where timber is to be Measured or Marked after date of timber sale advertisement and approximate location of sample Marked timber under BT2.36 and BT2.4;
- (c) Boundaries of Clearcutting Units, Overstory Removal Units, and Understory Removal Units under BT2.3;
- (d) Diameter limits for Overstory Removal Units and Understory Removal Units under BT2.33 and BT2.34;
- (e) Areas where leave trees are Marked to be left uncut under BT2.35;
- (f) Specified Roads listed in AT7;
- (g) Sources of base course, surface rock, and rock riprap listed in the Schedule of Items under CT5.221;
- (h) Roads where log hauling or use is prohibited or restricted under BT5.12;
- (i) Roads and trails to be kept open under BT6.22;
- (j) Improvements to be protected under BT6.22;
- (k) Locations of known wildlife or plant habitat and cave resources to be protected under BT6.24;
- (l) Locations of areas known to be infested with specific invasive species of concern under BT6.35;
- (m) Maximum stump heights when more than one height is listed by areas in AT6 under BT6.412;
- (n) Skidding or yarding methods specified under BT6.42;
- (o) Streamcourses to be protected under BT6.5;
- (p) Locations of meadows requiring protection under BT6.61;
- (q) Locations of wetlands requiring protection under BT6.62;
- (r) Locations of temporary roads to be kept open under BT6.631; and
- (s) Other features required by Division BT or CT.

BT1.2 Claims. Valid claims are excluded from Sale Area, except those on which timber cutting is authorized

in writing by the claimant and except mining claims on which cutting is authorized by the Act of July 23, 1955 (30 USC 614). Claims that limit Purchaser’s rights to operate under this contract and that Forest Service has been able to identify are shown on Sale Area Map. Purchaser is not obligated to operate contrary to existing claim limitations. Forest Service shall designate boundaries of claims on the ground to the extent necessary to identify Included Timber.

BT2.0—TIMBER SPECIFICATIONS

BT2.1 Included Timber. “Included Timber” consists of:

BT2.11 Standard Timber. Live and dead trees and portions thereof that meet Utilization Standards under BT2.2 and are designated for cutting under BT2.3.

BT2.12 Substandard Timber. Live and dead trees that:

- (a) Do not meet Utilization Standards and
- (b) Are located in Clearcutting Units or construction clearings or are otherwise designated for cutting.

BT2.13 Damaged Timber.

BT2.131 Damaged by Purchaser. Undesignated live trees meeting Utilization Standards:

(a) Within 200 feet slope distance from centerline of roads constructed hereunder that are damaged by Purchaser’s construction to the extent that considerable deterioration or mortality is imminent and are designated by Forest Service for felling before the nearest road segment is Substantially Completed or

(b) That are damaged by Purchaser in logging and are subsequently Marked before Purchaser has completed skidding or yarding operations in the immediate area.

By agreement, such trees may be left without charge if their removal would cause undue damage or be grossly uneconomic.

BT2.132 Negligent or Willful Damage. Undesignated timber meeting Utilization Standards and unnecessarily damaged or negligently or willfully cut by Purchaser, if included by Contracting Officer.

BT2.133 Damage by Catastrophe. As provided under BT8.32, undesignated live and dead timber within Sale Area, meeting Utilization Standards, and affected by Catastrophic Damage. “Catastrophic Damage” as used hereunder is major change or damage to Included Timber on Sale Area, to Sale Area, to access to Sale Area, or a combination thereof:

(a) Caused by forces, or a combination of forces, beyond control of Purchaser, occurring within a 12-month period, including, but not limited to, wind, flood, earthquake, landslide, fire, forest pest epidemic, or other major natural phenomenon and

(b) Affecting the value of any trees or products meeting Utilization Standards, within Sale Area and estimated to total either:

- (i) More than half of the estimated timber quantity stated in AT2 or
- (ii) More than two hundred thousand cubic feet (2,000 CCF) or equivalent.

Catastrophic Damage does not include changes caused by forest pest epidemics or foreseeable deterioration if Included Timber was sold for salvage or pest control.

BT2.134 Minor Damage by Natural Causes. Undesignated trees within Sale Area and meeting Utilization Standards, in amounts less than specified in BT2.133, that become insect infested, windthrown, suffer serious damage, or die, as designated by agreement.

BT2.14 Unintentionally Cut Timber. Trees, within or immediately adjacent to Sale Area or to road construction or other authorized clearing outside Sale Area, not designated for cutting under BT2.3 but that are cut through mistake by Purchaser, when included by Contracting Officer.

BT2.15 Construction Timber. Trees to be used for construction under BT5.1.

BT2.16 Other Material. Species or products not listed in AT2, upon written approval of Contracting Officer under BT3.41.

BT2.2 Utilization and Removal of Included Timber. "Utilization Standards" for trees and minimum pieces are stated in AT2. To meet minimum tree specifications, trees must equal or exceed tree diameters listed in AT2 and contain at least one minimum piece. Except for timber required or authorized to be left, Purchaser shall fell and buck such trees and shall remove from Sale Area all pieces that:

- (a) Meet minimum piece standards in AT2 or
- (b) Do not meet such standards, but would have qualified as part of minimum pieces if bucking lengths were varied to include such material.

BT2.3 Timber Designations. Timber designated for cutting shall be confined to Sale Area, except as provided in BT2.131, BT2.14, BT2.15, BT2.32, and BT5.1. Sale Area Map indicates Payment Units, if any, where Marking under BT2.35 is to be done after timber sale advertisement, except for construction clearing under BT2.32, designation changes under BT2.37, and damaged timber.

The boundaries of Clearcutting Units, Overstory Removal Units, and Understory Removal Units were plainly Marked on ground before timber sale advertisement and are shown on Sale Area Map. Boundary trees shall not be cut. Such units where Measuring is to be completed after date of timber sale advertisement are also shown. The number of units and approximate acreage of timber designations are stated in AT3.

BT2.31 Clearcutting Units. All trees that meet Utilization Standards within "Clearcutting Units" are designated for cutting.

BT2.32 Construction Clearing. All timber is designated for cutting that is within the clearing limits of roads constructed hereunder or is in other authorized clearings. All dead or unstable live trees are designated for cutting that are sufficiently tall to reach Purchaser's landings or the roadbed of Specified and Temporary Roads when Marked in advance of felling of timber in the immediate vicinity. Pieces meeting Utilization Standards from such dead or unstable live trees shall be removed, unless there is agreement that to do so could damage the

road. Such designation may be revised as part of agreed changes in road location under BT5.2.

BT2.321 Specified Road Clearings. Timber within the clearing limits of Specified Roads is within separate Payment Units, as shown on Sale Area Map, and the quantities are in AT2. These Payment Units are subject to revision, as specified in BT2.37. The quantities of dead or unstable trees designated outside the clearing limits are not included in AT2.

BT2.322 Other Authorized Clearings. Timber within authorized clearings for Temporary Roads, landings, or other construction clearings is designated for cutting. Quantities of such timber are not included in AT2.

BT2.33 Overstory Removal Units. All trees within "Overstory Removal Units" are designated for cutting when they meet Utilization Standards and equal or exceed the diameter limits shown on Sale Area Map.

BT2.34 Understory Removal Units. All trees within "Understory Removal Units" are designated for cutting when they meet Utilization Standards and are smaller than the diameter limits shown on Sale Area Map.

BT2.35 Individual Trees. All trees to be cut, other than in the units described in BT2.31, BT2.32, BT2.33, and BT2.34, are Marked or designated by description. Trees are "Marked" when individually designated by Forest Service with paint marks above and below stump height.

Sale Area Map indicates areas plainly identified on the ground where leave trees are Marked to be left uncut.

BT2.36 Incompletely Measured Payment Units. Trees within incompletely Measured Payment Units shown on Sale Area Map at time of timber sale advertisement shall be designated in accordance with CT2.36. A representative sample of the timber to be designated has been Marked prior to timber sale advertisement in accordance with such rules. The approximate locations of the representative sample areas are shown on Sale Area Map.

BT2.37 Designation Changes. Within Sale Area, minor adjustments may be made in boundaries of cutting units or in the timber individually Marked for cutting when acceptable to Purchaser and Forest Service.

In event Contracting Officer accepts alternate facilities under BT5.26, Contracting Officer shall revise the affected Payment Units and adjust estimated quantities.

In the event Purchaser does not construct portions of Specified Roads, Payment Units involved shall be revised to eliminate the road portions not to be constructed. Parts of such areas within non-road-related Payment Units shall be added to such Payment Units and the timber thereon shall be designated by the methods provided for in the Payment Units. Estimated quantities for Payment Units so revised shall be adjusted as necessary.

BT2.4 Quantity Estimate. The estimated quantities of timber by species designated for cutting under BT2.3 and expected to be cut under Utilization Standards are listed in AT2. Estimated quantity in AT2 does not include the following:

- (a) Damaged timber under BT2.13;
- (b) Unintentionally cut timber under BT2.14;

(c) Construction timber under BT2.15 cut outside of Payment Units and removed from construction use for utilization by Purchaser;

(d) Timber within clearing limits of Temporary Roads or other authorized clearings and that is not designated under BT2.31, BT2.33, BT2.34, or BT2.35; or

(e) Dead or unstable live trees that are sufficiently tall to reach Purchaser's landings or the roadbed of Specified Roads under BT2.32.

Estimated quantities for such timber not included in AT2 shall be determined as stated in CT6.8.

If Sale Area Map shows Payment Units where Marking or Measuring is to be completed after date of timber sale advertisement, the objective of Forest Service shall be to designate for cutting in such Payment Units sufficient timber so that Sale Area shall yield the approximate estimated quantities by species or species groups stated in AT2. However, the estimated quantities stated in AT2 are not to be construed as guarantees or limitations of the timber quantities to be designated for cutting under the terms of this contract.

Quantity adjustments shall not be made under this Section after there is modification for Catastrophic Damage under BT8.32.

BT2.41 Adjustment for Quantity Deficit. If Sale Area Map shows Payment Units where Marking or Measuring is to be completed after the date of timber sale advertisement and if Contracting Officer determines that a deficit in the estimated quantity will cause the quantity designated to be less than 90 percent of the total estimate shown in AT2, Forest Service, upon request by Purchaser, shall designate additional timber within Sale Area. Such additional timber shall be limited to that estimated to be necessary to reach approximately the estimated quantities by species listed in AT2. Any such additional designation shall be consistent with land and resource management plans.

BT2.42 Adjustment for Excess Quantity. If Sale Area Map shows Payment Units where Marking or Measuring is to be completed after date of timber sale advertisement and if Contracting Officer determines that the quantity designated will be more than 120 percent of the total estimated quantity listed in AT2, Forest Service, upon request by Purchaser, shall make an adjustment in Marking or cutting unit boundaries with the objective of designating for cutting the approximate estimated quantities by species listed in AT2. Such adjustments in quantities shall be confined to (a) Marking adjustments on Sale Area and (b) reduction in area to be cut over. Such adjustments or reductions shall not conflict with the silvicultural treatment being applied on Sale Area and shall not materially change the average value by species of the timber designated for cutting. Such adjustments may be made notwithstanding the provisions of BT1.1 and BT2.3.

If the timber designated for cutting is not reduced by such adjustments to less than 120 percent of the total estimated quantity listed in AT2, Purchaser, after cutting 120 percent of the total estimated quantity listed in AT2, may elect to have Sale Area reduced to eliminate Payment Units where felling has not begun.

BT2.43 Adjustment for Quantity Errors. An estimated quantity shown in AT2 shall be revised by correcting identified errors made in determining estimated quantity that result in a change in total timber sale quantity of at least 10 percent or \$1,000 in value, whichever is less, when an incorrect estimated quantity is caused by computer malfunction or an error in calculations, area determination, or computer input.

No adjustments in quantity shall be made for variations in accuracy resulting from planned sampling and Measuring methods or judgments of timber quality or defect.

For payment purposes, corresponding revisions in quantity and total payment shall be shown in AT4c for each Payment Unit involved. Adjustment in rates will not be made. Adjustment in quantities shall not obligate Forest Service to designate additional quantities when the original quantity estimate is overstated.

BT3.0—RATES OF PAYMENT

BT3.1 Current Contract Rates. Included Timber that is Released for Cutting shall be paid for at Current Contract Rates determined under this Section. "Current Contract Rates" shall be (a) Flat Rates and (b) Tentative Rates adjusted by the escalation procedures in BT3.2. Flat Rates and Tentative Rates shall be those listed in AT4, unless superseded by rates redetermined under BT3.3 or established for Contract Term Extension.

Current Contract Rates, based on rates redetermined under BT3.3 or established under BT8.23, shall apply to all Payment Units from which removal of timber from Sale Area has not been completed on the effective date of the revised rates, except Current Contract Rates in effect at the time of Release for Cutting shall be applicable:

(a) On Payment Units for Specified Roads Released for Cutting on which clearing has begun and

(b) For not more than two other Payment Units from which removal from Sale Area has begun.

Notwithstanding the exceptions provided in this Section, rates redetermined under BT3.31, BT3.32, and BT3.33 shall apply to all Included Timber removed subsequent to the rate redetermination.

In event there are more than two Payment Units from which timber removal has not been completed on the effective date, the rates in effect at the time of Release for Cutting shall apply to the two units from which the greatest estimated proportions of Payment Unit quantities have been removed. Otherwise, in released Payment Units, redetermined rates or rates established for Contract Term Extension shall apply to the entire quantity shown in AT4c for those units. In addition, Required Deposits shall be made as listed in AT4 and CT5.32, or established under BT3.3 or BT8.23.

In the event Termination Date is adjusted under BT8.21 or BT8.212, Current Contract Rates shall be continued in the same manner as immediately prior to the adjustment period.

"Current Contract Value" is the sum of the products of Current Contract Rates and estimated remaining

quantities by species of Included Timber meeting Utilization Standards.

BT3.2 Escalation Procedure. Tentative Rates for those species and products listed in AT4a are subject to quarterly escalation in accordance with the following procedures: The calendar quarter index average for each price index described in AT5 is the arithmetic average of the three such monthly price indices preceding January 1, April 1, July 1, and October 1. The difference between calendar quarter index average and Base Index listed in AT4a shall be the basis for quarterly escalation. To arrive at Current Contract Rates for Payment Units Released for Cutting during the preceding calendar quarter, Tentative Rates for each species shall be reduced or increased by such difference, except when the calendar quarter index average is:

(a) Less than the Base Index, the reduction shall not result in a rate below Base Rate or

(b) Greater than the Base Index, the increase shall not exceed the difference between Tentative Rate and Base Rate.

In the event of Contract Term Extension, the escalation procedure will be used during the extension period, except that adjusted payment rates for any calendar quarter cannot be less than Tentative Rates, for each species and product group, established under BT8.23 for the extension period.

BT3.21 Unavailable Index. If an index described in AT5 is no longer available, Contracting Officer may replace that index. If Contracting Officer determines that a replacement index does not exist, Current Contract Rates for the remainder of the timber sale shall be a Flat Rate. Flat Rates will be Tentative Rates adjusted by the arithmetic average of the index described in AT5 for a 12-month period prior to its becoming unavailable using the quarterly adjustment procedure outlined in BT3.2. Contracting Officer will determine availability and a beginning point to average the index for Flat Rates. Such Flat Rates are subject to rate redetermination as provided elsewhere under this contract.

BT3.3 Rate Redetermination. Rates may be redetermined as set forth in this Section. Bid Premium Rates shall be added to all redetermined rates, except as provided in BT3.31, BT3.32, and BT3.33.

Rate redeterminations shall be made in accordance with the standard Forest Service methods in effect 45 days prior to rate redetermination. Such methods shall take into consideration factors that may affect timber value at rate redetermination date.

Redetermined rates shall not be less than Base Rates listed in AT4, except for reduction under BT3.31, BT3.32, or BT3.33. Required Deposits shall be redetermined. Redetermined Specified Road construction cost is subject to the limitations of BT5.26.

BT3.31 Rate Redetermination for Environmental Modification. In the event of a contract modification under BT8.33 or partial termination under BT8.34, Contracting Officer shall make an appraisal to determine for each species the difference between the appraised unit value of Included Timber remaining

immediately prior to the revision and the appraised unit value of Included Timber to be cut under the modification. The appraisal shall consider the estimated cost of any construction work listed in the Schedule of Items that was performed and abandoned.

Tentative Rates and Flat Rates in effect at the time of the revision will be adjusted by said differences to become Current Contract Rates. Accordingly, Base Rates shall be adjusted to correspond to the redetermined rates if redetermined rates are less than the original Base Rates, subject to a new Base Rate limitation of the cost of essential reforestation or 25 cents per hundred cubic feet or equivalent, whichever is larger. However, existing Base Indices shall not be changed under this Subsection.

Redetermined rates, or differences for rates subject to BT3.2, and Required Deposits shall be considered established under BT3.1 for Included Timber removed subsequent to the contract revision.

BT3.32 Rate Redetermination after Catastrophic Damage. In event of Catastrophic Damage and adjustment, if any, of Included Timber, Contracting Officer shall make an appraisal to determine for each species the catastrophe-caused difference between the appraised unit value of Included Timber remaining immediately prior to the catastrophe and the appraised unit value of existing and potential Included Timber immediately after the catastrophe. Included Timber is any that would not be eliminated under BT8.32. Potential Included Timber is any that would be added under BT8.32.

Tentative Rates and Flat Rates in effect at the time of catastrophe shall be adjusted by said differences to become the redetermined rates for the purpose of a contract modification under BT8.32. Accordingly, Base Rates shall be adjusted to correspond to the redetermined rates if redetermined rates are less than the original Base Rates, subject to new Base Rate limitations of 25 cents per hundred cubic feet or equivalent. However, existing Base Indices shall not be changed under this Subsection.

Upon agreement under BT8.32, redetermined rates and Required Deposits shall be considered established under BT3.1 for Included Timber removed subsequent to Catastrophic Damage.

At time of such appraisal, Specified Road construction cost shall include the estimated cost of any construction work listed in the Schedule of Items performed and abandoned.

BT3.33 Rate Redetermination for Market Change. In the event of delay or interruption, exceeding 90 days, under BT8.33, Contracting Officer shall make an appraisal to determine for each species the difference between the appraised unit value of Included Timber immediately prior to the delay or interruption and the appraised unit value of Included Timber immediately after the delay or interruption. The appraisal shall be done after any rate redetermination done pursuant to BT3.31, using remaining volumes.

Tentative Rates and Flat Rates in effect at the time of delay or interruption or established pursuant to BT3.31 will be reduced, if appraised rates declined during the delay or interruption, to become Current Contract Rates.

Increases in rates will not be considered. Accordingly, Base Rates shall be adjusted to correspond to the redetermined rates if redetermined rates are less than the original Base Rates, subject to a new Base Rate limitation of the cost of essential reforestation or 25 cents per hundred cubic feet or equivalent, whichever is larger. However, existing Base Indices shall not be changed under this Subsection.

Redetermined rates shall be considered established under BT3.1 for Included Timber removed subsequent to the delay or interruption.

BT3.34 Emergency Rate Redetermination.

Forest Service shall redetermine rates if, upon Purchaser's application, Forest Service determines that, because of changes in the timber market since the award date or the last rate redetermination under this provision, the Producer Price Index identified in AT17 has declined by 25 percent. Rates shall be redetermined under BT3.3 and shall be considered established under BT3.1 for Payment Units described therein at the time of Purchaser's application. This Subsection shall not apply during Contract Term Extension.

BT3.4 Other Payment Rates.

BT3.41 Material and Quantities Not in AT2.

Incidental amounts of products or portions of trees of species listed in AT2 that do not meet Utilization Standards may be removed without charge. Such material may be purposely removed in more than incidental amounts without charge upon written approval of Contracting Officer, and subject to agreement on deposits if needed for road maintenance and use.

Other species or products not listed in AT2 may be cut and removed upon written approval of Contracting Officer and subject to agreement on rates of payment and deposits if needed for road maintenance and use.

Timber for which the quantity is not included in the estimate listed in AT2, as described in BT2.4, shall be paid for at Current Contract Rates and Required Deposits.

BT3.42 Timber Cut Through Mistake. Undesignated timber meeting Utilization Standards, cut by Purchaser through mistake and included by Contracting Officer under BT2.14, shall be removed and paid for at Current Contract Rates and Required Deposits, unless such material is not listed in AT2. In such event, Contracting Officer, in accord with standard Forest Service methods, shall establish rates to be paid.

BT3.43 Undesignated Timber Damaged Without Negligence. Undesignated timber meeting Utilization Standards, damaged without negligence by Purchaser and designated by Forest Service under BT2.131, shall be cut, removed, and paid for at Current Contract Rates and Required Deposits.

BT3.44 Undesignated Timber Unnecessarily Damaged or Negligently or Willfully Cut. Undesignated timber meeting Utilization Standards and unnecessarily damaged or negligently or willfully cut by Purchaser, if included by Contracting Officer under BT2.132, shall be cut, removed, and paid for at Current Contract Rates and

Required Deposits that are in addition to liquidated damages under BT3.45.

If such timber is of a species or size not listed in AT2 or is of a quality different from designated timber, Contracting Officer shall establish payment rates in accord with standard Forest Service methods.

BT3.45 Liquidated Damages. Unnecessary damage to or negligent or willful cutting of undesignated timber, as described in BT3.44, on portions of Sale Area cut over under this contract is likely to cause substantial silvicultural or other damage to the National Forest. It will be difficult, if not impossible, to determine the amount of such damage. Therefore, Purchaser shall pay as fixed, agreed, and liquidated damages an amount equivalent to the amount payable at Current Contract Rates. If designated by Contracting Officer, Purchaser shall remove such damaged or cut timber and pay for it at Current Contract Rates.

BT4.0—PAYMENTS

BT4.1 Amount Payable for Timber. Except as provided in BT3.1, Current Contract Rates and Required Deposits in effect when a Payment Unit is Released for Cutting shall be applied to the timber quantities to determine the amount Purchaser shall pay. A "Payment Unit" is a portion of Sale Area established for payment purposes.

BT4.2 Timber Sale Account. "Timber Sale Account" is an account maintained by Forest Service of all Purchaser's deposits, credits, payment guarantees, and the charges for:

- (a) Timber at Current Contract Rates;
- (b) Slash disposal and road maintenance at Required Deposit rates;
- (c) Cooperative work at rates established by specific agreement under BT4.218; and
- (d) Other charges provided in this contract.

Cash deposits shall be recorded currently in such account.

Charges for Payment Units Released for Cutting shall be made when Forest Service prepares and furnishes to Purchaser periodic statements of quantity and value of such timber. Charges subject to escalation under BT3.2 shall be made initially on the basis stated in BT4.214 and shall be adjusted at the end of each calendar quarter, as provided in BT3.2.

Charges shall be made according to BT3.4 when trees are subsequently Marked or designated for cutting.

BT4.21 Cash Deposits. Within the limitations of this Subsection, Purchaser shall make cash deposits to meet Purchaser's obligations within 15 days of billing by Forest Service. Deposits shall be made to Forest Service, U.S.D.A., by mail or delivery to the address to be furnished by Forest Service. Forest Service shall explain the bill at the time it requests each deposit.

BT4.211 Downpayment. The downpayment amount shown in AT15 may not be applied toward any other payment required under the provisions of this contract, except damages determined pursuant to BT9.4, transferred to other timber sales, or refunded until stumpage value representing 25 percent of the total bid value of

the timber sale is shown on Timber Sale Account to have been cut, removed, and paid for, or if 36 CFR 223.49(e) is applicable, the estimated value remaining to be cut and removed, as shown on Timber Sale Account, is equal to or less than the amount of the downpayment. For lump sum timber sales, the downpayment may be applied to payment for release of the single payment unit.

If Forest Service makes a determination that this contract should not have been included under increased downpayment requirements (36 CFR 223.49(e)), the downpayment shall be revised and applied in accordance with 36 CFR 223.49(f).

BT4.212 Advance Deposits. Purchaser agrees to make cash deposits in advance of cutting to meet charges under BT4.2.

Forest Service billings for advance cash deposits shall be in such amounts that Timber Sale Account will maintain an unobligated balance that covers the applicable charges for Payment Units Released for Cutting and designated material not included in AT2 expected to be cut within the next 60 days. This advance cash deposit may be reduced to a smaller amount by the terms of BT4.211, BT4.213, BT4.215, and/or BT4.217. Except for amounts required pursuant to BT4.211, BT4.213, and BT4.217, Purchaser shall not be required to make advance deposits above those required under this Item.

When the credit balance in Timber Sale Account is exceeded by the charges for timber within Payment Units Released for Cutting and for the estimated quantity to be cut in 10 days of cutting designated material not included in AT2, Contracting Officer will suspend all or any part of Purchaser's Operations until payment or acceptable payment guarantee is received.

BT4.213 Periodic Payment Schedule. Purchaser shall make periodic payments for stumpage value, as shown in AT16.

In the event Purchaser has not paid the amount(s) stated in AT16 as stumpage for quantity removed by the periodic payment determination date(s), Forest Service shall issue a bill for collection for the difference between the required amount and payments made by Purchaser. If payment(s) fall due on a date other than a normal billing date, the payment date shall be extended to coincide with the next Timber Sale Account billing date.

The amount of the periodic payment(s) will be reduced if the payment(s) would result in Purchaser's credit balance for timber charges exceeding the Current Contract Value.

Only cash may be used for this purpose. No other form of payment is acceptable. Forest Service will apply the payments to subsequent charges on this contract under the terms of BT4.212.

Except for Contract Term Extensions under BT8.23, periodic payment determination date(s) that have not been reached shall be adjusted one day for each additional day of contract time granted.

BT4.214 Deposits for Charges Subject to Escalation. Deposits requested to cover estimated charges for timber subject to escalation under BT3.2 shall

be based upon Current Contract Rates and related deposits in effect during previous calendar quarter.

BT4.215 Deposits When Payment Guaranteed. To the extent payment guarantee is provided under BT4.3, requirements for advance cash deposits under BT4.212 shall be waived for the value of timber on Sale Area that has been Released for Cutting, but not removed, and for the estimated value of products removed from Sale Area for not more than a monthly billing period, subject to the provisions of BT4.4.

BT4.216 Blanket Cash Deposits. Purchaser may make cash deposits under a written agreement to cover charges made under this and other timber sale contracts within the same National Forest. Forest Service shall allocate such deposits to such timber sales. When there is to be no timber cutting hereunder for 30 days or more and payment of current charges has been made, the allocation to this timber sale shall be reallocated to other timber sales within the same National Forest at Purchaser's request. Purchaser shall not start cutting until allocation has again been made to this timber sale.

BT4.217 Extension Deposits. In the event of Contract Term Extension, Forest Service shall divide the difference between Current Contract Value as of the start of any Contract Term Extension and the credit balance of any deposit made pursuant to BT4.213 by the number of whole months remaining in Normal Operating Season(s) within the extension period to determine the amount of each "Extension Deposit."

Purchaser shall make the initial Extension Deposit prior to Forest Service executing the contract modification. In response to Forest Service billing under BT4.21, Purchaser shall make advance cash deposits. Such deposits shall at least equal each Extension Deposit required for each whole month remaining in Normal Operating Season(s) during the extension period. Extension Deposits shall be due by the last day of each month during Normal Operating Season whether or not any Payment Unit is to be released.

Due dates for Extension Deposits during the extension period may be delayed when Purchaser earns Contract Term Adjustment if Termination Date, as adjusted, results in one or more additional complete months within Normal Operating Season(s).

BT4.218 Cooperative Deposits. On a basis of cooperation or assistance (16 USC 572) and by a written agreement, Forest Service shall perform all or portions of the work that Purchaser is obligated to perform under this contract, as well as furnish other services in connection with activities under this contract. When Forest Service is to perform such work, Purchaser shall make one or more deposits to cover the estimated cost of the work. On request of Purchaser, Forest Service shall render monthly accounts, as may be specified in such agreement.

BT4.22 Temporary Reduction of Downpayment. When, under BT8.33, Contracting Officer orders a delay or interruption of Purchaser's Operations for more than 30 days when scheduled operations would be occurring but for the order, the downpayment amount

required shall be temporarily reduced upon the written request of Purchaser or at the discretion of the Contracting Officer. For the period of the delay or interruption, the downpayment on deposit may be reduced to \$1,000 or two (2) percent of the downpayment amount listed in AT15, whichever is larger.

Any downpayment amount temporarily reduced pursuant to this Subsection may be refunded or transferred at the request of Purchaser. However, if Purchaser has outstanding debt owed to the United States, Contracting Officer must apply the amount of downpayment that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act, as amended (31 USC 3701, *et seq.*).

Upon Purchaser's receipt of bill for collection and written notice from Contracting Officer that the basis for the delay or interruption no longer exists, Purchaser shall restore the downpayment to the full amount shown in AT15 within 15 days after the date the bill for collection is issued, subject to the provisions of BT4.4. Purchaser shall not resume contract operations until the downpayment amount is fully restored.

BT4.23 Refund of Excess Cash. If at any time the credit balance of Timber Sale Account exceeds the charges for timber within Payment Units Released for Cutting and for designated material not included in AT2 that Forest Service estimates will be cut within the next 60 days, any portion of such excess that is due to cash in the account shall be refunded, if requested by Purchaser, unless deposited under BT4.211, BT4.213, or BT4.217. If Purchaser plans no cutting within the next 60 days, Forest Service may refund the entire unencumbered cash balance, except as provided in this Subsection. However, Forest Service shall not reduce the credit balance below the total value of partially cut Payment Units and designated material not included in AT2 that is cut before operations cease. After a refund for a shutdown, deposits shall be made to meet the requirements of BT4.212 before additional timber may be cut.

BT4.24 Refund after Final Charges for Released Timber. Any cash deposit, in excess of that required to meet charges under BT4.2, shall be refunded or transferred within 15 days of Purchaser's request after final charges for Included Timber have been made, except for amounts estimated to be required under BT9.5.

BT4.3 Payment Guaranteed by Bond or Deposited Securities. To guarantee payment, Purchaser may furnish and maintain an acceptable surety bond or deposit in a Federal Depository negotiable securities of the United States. The securities shall be deposited through the Regional Fiscal Agent accompanied by a power of attorney and agreement authorizing the bond-approving officer to sell or collect such securities if payment is not made within 15 days of billing by Forest Service. The penal sum of such surety bond or the market value at time of deposit of such negotiable securities shall be the maximum amount of the payment guaranteed.

For payment purposes, penal sum of the surety bond or market value at time of deposit of negotiable securities

shall be in lieu of the performance bond furnished under BT9.1.

BT4.31 Blanket Bond. If Purchaser furnishes an acceptable bond, or deposits securities, in accordance with BT4.3, to guarantee payment for timber from this and other timber sales within the same National Forest, the amount of such bond or deposited securities shall be allocated to such timber sales by Forest Service. When there is to be no timber cutting hereunder for 30 days or more and payment of current charges has been made, the allocation to this timber sale shall be reallocated to other timber sales at Purchaser's request. Purchaser shall not start cutting hereunder until this timber sale receives an allocation that will meet the obligation for payment guarantee.

BT4.32 Letters of Credit for Payment Bond. Notwithstanding the provisions of BT4.3, Purchaser may use letters of credit in lieu of a surety bond for payment bond purposes when approved by Contracting Officer.

BT4.4 Payments Not Received. (a) Payments are due and payable on the date of issue indicated on the bill for collection. When a payment for timber cut and other charges is not received at the location designated by Forest Service by the date allowed in the bill for collection for receipt of payment, Contracting Officer will suspend all or any part of Purchaser's Operations until payment or acceptable payment guarantee is received. Other charges include, but are not limited to:

- (i) Slash disposal and road maintenance deposits;
- (ii) Cooperative work at rates established by specific agreement under BT4.218;
- (iii) Damages pursuant to BT9.4;
- (iv) Road use fees;
- (v) Restoration of downpayment pursuant to BT4.22;
- (vi) Periodic payments pursuant to BT4.213;
- (vii) Extension Deposits pursuant to BT4.217; and
- (viii) Other mandatory deposits.

(b) Failure to pay amounts due by the date allowed in the bill for collection for receipt of payment shall be considered a breach under BT9.3. The 30-day notice period prescribed therein shall begin to run as of the end of business on the date allowed for receipt of payments. If the performance or payment is guaranteed by surety bond, the surety will receive a copy of the written notification of breach. Demand will be made on the surety or other institution providing the guarantee or bond instrument for immediate payment 10 days after issuance of written notification of the breach.

(c) Pursuant to the Debt Collection Improvement Act of 1996, as amended, if payment is not received by Forest Service within 15 days after the date of issue indicated on the bill for collection:

- (i) Simple interest shall be assessed at the higher of the Current Value of Funds Rate or the Prompt Payment Rate as established by the Secretary of the Treasury. Interest will begin to accrue as of the date of issue indicated on the initial bill for collection.

(ii) Debtors will be assessed administrative charges, in addition to the delinquent amount due. Administrative charges are those additional costs incurred by the Government in processing, handling, and collecting delinquent debts.

(iii) A penalty charge of six (6) percent per annum will be assessed on any portion of a debt delinquent more than 90 days. This penalty charge is in addition to interest and administrative charges under paragraphs (c)(i) and (c)(ii). The penalty charge shall accrue from the date of issue indicated on the bill for collection and shall be assessed on all outstanding amounts, including interest and administrative costs assessed under paragraphs (c)(i) and (c)(ii).

(iv) Payments will be credited on the date received by the Federal Depository or Collection Officer designated on the bill for collection.

(d) Forest Service remedies for Purchaser's failure to make payment for timber cut and other charges when due, except for accrual of interest, suspension of all or any part of Purchaser's Operations, and administrative offset, shall be stayed for so long as:

(i) A bona fide dispute exists as to Purchaser's obligation to make such payment and

(ii) Purchaser files and prosecutes a timely Claim.

BT5.0—TRANSPORTATION FACILITIES

BT5.1 Authorization. Purchaser is authorized to construct and maintain roads, bridges, and other transportation facilities, as needed for harvesting Included Timber on National Forest and other lands where Forest Service has such authority. As used in this contract "construct" includes "reconstruct."

Location and construction of Specified Roads shall be in accordance with BT5.2. Unless otherwise provided herein, construction may be progressive during this contract. Maintenance shall be governed by BT5.3. The location and clearing widths of all Temporary Roads or facilities shall be agreed to in writing before construction is started. "Temporary Roads" are roads other than Specified Roads that are constructed by Purchaser for the purpose of harvesting Included Timber.

Purchaser is authorized to cut and use for construction without charge construction timber designated by agreement.

BT5.11 Requirements of Rights-of-Way. Purchaser's road construction and use of rights-of-way identified in attached list or CT5.11 shall be confined to rights-of-way and limited by the related easements and stipulations, if any, unless Purchaser makes other arrangements that will not infringe upon or adversely affect the grantee's rights. Easements or right-of-way documents are available in the offices of the Forest Supervisor and District Ranger.

BT5.12 Use of Roads by Purchaser. Except as provided herein, Purchaser is authorized to use existing National Forest system roads and Specified Roads listed in AT7, when Forest Service determines that such use

will not cause damage to the roads or National Forest resources.

If Purchaser's use of an existing temporary or National Forest system road, not listed in AT7, cannot be satisfactorily accommodated without reconstruction, Purchaser shall be authorized to use such road upon agreement as to the minimum reconstruction work that Purchaser shall perform before hauling. When appropriate, such road shall be included in AT7 as an alternate facility under BT5.26.

CT5.12 lists existing roads shown on Sale Area Map that for such reasons as limitations in structural capacity, safety, and protection of soil, water, and roads:

(a) Cannot be used for log hauling or

(b) May be used only under the restrictive limitations stated therein.

BT5.2 Specified Roads. "Specified Roads" are roads, including related transportation facilities and appurtenances, shown on Sale Area Map and listed in AT7. Purchaser shall construct Specified Roads used under this contract. Construction initiated by Purchaser on any such Specified Road shall be completed to an agreed terminus that meets Purchaser's needs and prevents unnecessary impact on National Forest resources. Construction to such terminus shall be in full accordance with Plans and specifications and the Schedule of Items identified in AT7 or specifications attached hereto, except for agreed adjustments needed to accommodate such terminus. The "Schedule of Items" is a list and description of construction items, quantities, units of measure, methods of measurement, unit price, and total amount. Forest Service shall revise the Schedule of Items to show the estimated cost for the portion constructed to the revised terminus as a separate segment.

A Temporary Road shall not be constructed substantially on the location for a Specified Road, except by agreement.

In event of agreed substitution or revision of construction design, specifications, or performance responsibility under BT5.212, BT5.25, BT5.26, or CT5.215, AT7 shall be modified. If Purchaser does not need a Specified Road or a portion of a Specified Road for harvesting Included Timber and the Specified Road is not constructed, the deletion of the road or road segment will be a mutually agreed Design Change and Timber Sale Account will be adjusted for the reduction in cost, as provided in BT5.25.

References in the contract to specifications, standards, or test methods adopted by the American Association of State Highway and Transportation Officials (AASHTO), American Society for Testing and Materials (ASTM), General Services Administration (GSA), or other recognized national technical associations shall mean specifications, standards, or test methods, including interim or tentative issues, that are in effect on the date of timber sale advertisement.

BT5.21 Engineering. Forest Service completed survey and design for Specified Roads prior to timber sale advertisement, unless otherwise shown in AT8 or

Purchaser survey and design are specified in AT7. On those roads for which Forest Service completes the design during the contract, the design quantities shall be used as the basis for revising estimated costs stated in the Schedule of Items and adjusting Timber Sale Account.

Forest Service engineering shall be completed according to the schedule in AT8. Should Forest Service be unable to perform the designated survey and design by the completion date or other agreed to time, upon written agreement, Purchaser shall assume responsibility for such work. In such event, Contracting Officer shall revise:

(a) AT7 to show Purchaser's performance responsibility.

(b) The Schedule of Items to include costs of survey and design, as provided under BT5.24, and adjust Timber Sale Account, as provided in BT5.25. Forest Service shall calculate such costs, using unit rates comparable with those used in the Schedule of Items.

Purchaser shall furnish a schedule to Forest Service of specific dates for the start of construction. The schedule of construction shall be submitted to Forest Service for approval within 60 days after contract award and prior to beginning work. Purchaser's construction schedule shall reflect Forest Service survey and design completion dates. Forest Service may agree to Purchaser's request for an alternate date for starting construction.

Purchaser shall perform survey, design, and construction staking of Specified Roads to be engineered by Purchaser in accordance with specifications attached hereto. Based upon the quantities developed by such design, as approved by Forest Service, Contracting Officer shall revise the estimated costs stated in the Schedule of Items and adjust Timber Sale Account. The methods of computing such revised costs shall be consistent with the methods that would have been used had the engineering been performed prior to timber sale advertisement.

BT5.211 Contract Plans. "Plans" are documents that show location, details, and dimensions of the work to be performed. On any of the contract Plans where a portion of the work is drawn out and the remainder is shown in outline, the parts drawn out shall apply to all other like portions of the work.

"Shop Drawings" include drawings, diagrams, layouts, schematics, descriptive literature, illustrations, lists or tables, performance and test data, and similar materials furnished by Purchaser to explain in detail specific portions of the work required by the contract. Purchaser shall submit a minimum of five (5) sets of required Shop Drawings to Forest Service, three (3) sets of which will be retained by Forest Service. Shop Drawings shall not exceed 24 inches by 36 inches in size. Approval or rejection and date will be noted or stamped on each set. Unless agreed otherwise, Forest Service shall approve or reject the Shop Drawings within 10 days of submission. Such approval of the Shop Drawings shall not be construed as a complete check, but will indicate

only that the general method of construction and detailing is satisfactory. If the Shop Drawings are rejected, Purchaser must make the noted revisions and resubmit the Shop Drawings.

A change in the amount of construction work that exceeds construction tolerances specified in the specifications identified in AT7 caused by a Forest Service error in construction staking shall be treated as a Design Change. When incompatible situations arise between Plans, specifications, and actual conditions on the ground, Purchaser shall make corrections pursuant to BT5.253.

BT5.212 Construction Staking. Purchaser shall avoid careless or negligent damage to construction stakes, flags, or marks. If such damage occurs, Purchaser shall be required to replace stakes necessary to construction. Purchaser's replacement staking shall be approved by Forest Service. Alternatively, upon Purchaser's request, Contracting Officer may agree to perform such work under BT4.218.

When AT7 shows that construction stakes are to be set by Forest Service after clearing, Purchaser shall submit to Forest Service a written schedule for clearing, construction staking, and construction that will provide Forest Service a reasonable period for setting construction stakes. Time for setting construction stakes may be modified by written agreement.

If Forest Service performs construction staking for Specified Roads, timing of such staking shall permit Purchaser's clearing and other construction activity to proceed without hindrance or delay, provided Purchaser's construction activity is reasonably consistent with needs identified in Purchaser's Operating Schedule or amendments thereto.

Should Forest Service be unable to perform construction staking in such reasonable period, upon written agreement, Purchaser shall assume the responsibility for construction staking for agreed upon portions of Specified Roads. In such event, Contracting Officer shall revise:

(a) AT7 to show Purchaser's performance responsibility.

(b) The Schedule of Items to include costs of construction staking, as provided under BT5.24, and adjust Timber Sale Account, as provided in BT5.25. Forest Service shall calculate such costs, using unit rates comparable with those used in the Schedule of Items.

BT5.22 Material Delivery. Within 60 days after award date, Purchaser shall provide Forest Service a written schedule showing the desired delivery dates of any material to be supplied by Forest Service. With reasonable notice, schedule may be amended by agreement. Forest Service agrees to make delivery within 15 days after the scheduled delivery dates that are at least 60 days after the schedule is submitted, unless prevented by causes beyond control of Forest Service.

If Purchaser does not provide Forest Service the written schedule within the period provided in this Subsection, Forest Service agrees to make delivery within 90 days after a late schedule is submitted, unless

prevented by causes beyond control of Forest Service. After delivery to and written receipt by Purchaser, Purchaser is responsible for installation of needed material and for any loss of or damage to such material due to Purchaser's negligence prior to installation or return of unused material to Forest Service.

At Purchaser's option, Forest Service deliveries shall be to Purchaser's storage area, as agreed, or to the nearest practicable point to the job site along existing roads. Unused material shall be returned to Forest Service at location of delivery, unless agreed otherwise.

BT5.23 Use of Partially Constructed Roads.

Unless Contracting Officer determines that there is justification under existing conditions and ground conditions permit hauling without undue damage, portions of Specified Roads shall be Substantially Completed prior to their use for hauling timber. When necessary to facilitate construction and protect bridges and roads from damage, timber felled in construction and timber logged directly to the road from areas immediately adjacent thereto may be hauled before road construction is Substantially Completed. Such hauling shall be confined to periods when abnormal soil erosion and damage to National Forest lands will not result.

"Substantially Completed" means:

(a) Completion of grading and installation of drainage structures so they will function effectively and

(b) Laying the specified depth of base course, if any.

No more than half of Included Timber to be hauled over such portions of road shall be hauled until the base course has been applied.

Unless agreed otherwise, specified reconstruction shall be completed on any portion of road prior to hauling on that portion.

BT5.24 Estimated Cost. Estimated costs by construction phases for Specified Roads listed in AT7 are stated by segments in the Schedule of Items. Such estimated costs are subject to adjustment under BT3.3, BT5.2, BT5.21, BT5.212, BT5.25, and BT5.26. Appropriately adjusted costs shall be made a part of a revised Schedule of Items and shown as adjustments to Timber Sale Account. The revised Schedule of Items shall supersede any prior Schedule of Items when it is dated and signed by Contracting Officer and a copy is furnished to Purchaser.

BT5.25 Construction Cost Adjustment.

Contracting Officer, as provided in BT5.21, BT5.212, BT5.251, BT5.252, and BT5.253, shall adjust Specified Road construction cost estimates in the Schedule of Items and show the adjustments as credits or debits to Timber Sale Account in the month when the road segment is accepted.

BT5.251 Variation in Quantities. (a) This Item applies only to differences between quantities shown in the Schedule of Items and measured quantities actually constructed and accepted that are not covered under BT5.252 or BT5.253. Only changes in quantities where other than contract quantity or lump sum is specified in the Schedule of Items are subject to this Item.

(b) Adjustments to the Specified Road construction cost for variation in quantities shall be computed at unit rates established in the Schedule of Items for units of work actually constructed and measured in accordance with specified method of measurement shown in the Schedule of Items and described in the specifications identified in AT7, except that:

(i) When quantity of authorized work performed or material furnished by Purchaser, under any item shown in the Schedule of Items and covered by this Item, is more than 115 percent of original quantity, use Current Unit Rates to calculate the adjustment for that portion of work above 115 percent of original quantity.

(ii) When quantity of authorized work performed or material furnished by Purchaser, under any item shown in the Schedule of Items and covered by this Item, is less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost for such work. Any revised estimate shall use the same procedures as those used in original estimates using rates comparable to those used in computing the most recent cost estimate for the timber sale. The revised cost estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

(c) "Current Unit Rates" are Forest Service estimates of the unit rates for doing the work at the time the adjustment is approved.

BT5.252 Physical Change. (a) Forest Service shall adjust the Specified Road construction cost if, prior to acceptance under BT6.36, a physical change, caused by a single event and not due to negligence of Purchaser, results in an increase or decrease in work and/or materials furnished by Purchaser involving additional estimated cost of:

(i) More than \$10,000 or

(ii) More than 10 percent of total Specified Road construction cost, whichever is less.

(b) Increases to the Specified Road construction cost shall include cumulative estimated costs of repairing damage from things such as slides, washouts, landslips, and fire. Plans and specifications shall be revised when necessary to meet new conditions. Quantities of work and/or materials determined from such revised Plans and specifications, together with estimated quantities of work and/or materials abandoned, shall be the basis for the revised Specified Road construction cost.

(c) Forest Service shall determine difference in quantities for portions of Specified Road affected by physical change by comparing most recent previous quantities with total of:

(i) Estimated quantities actually constructed prior to physical change, including work abandoned, and

(ii) Estimated quantities to be constructed following physical change.

(d) Forest Service shall calculate the amount of increase to the Specified Road construction cost by applying:

(i) Current Unit Rates to differences when quantities increase and

(ii) Unit rates comparable to those used in computing most recent cost estimate for the timber sale when quantities decrease.

(e) When quantity of authorized work to be performed or material furnished by Purchaser, under any item shown in the Schedule of Items, is reduced to less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost for such work and adjust the Specified Road construction cost. Any revised estimate shall use the same procedures as those used in the original estimates using rates comparable to those used in the most recent cost estimate for the timber sale. The revised estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

BT5.253 Design Change. (a) "Design Change" is a change in work and/or materials shown in the Schedule of Items and described in Plans or specifications that has been mutually agreed to in writing or ordered by Contracting Officer. Changes of a minor nature (such as adjustment in horizontal and vertical alignment, that do not exceed specified tolerance, necessary to maintain or balance earthwork quantities substantially as designed) and variation in quantities, as described in BT5.251, shall not be considered Design Changes.

(b) Additions, deletions, or changes in types or diameter of culverts shown in Plans and changes in designated water sources shown on Plans shall be considered Design Changes.

(c) Forest Service may, by written notice from Contracting Officer, order changes in work to be performed and/or materials to be furnished by Purchaser within general scope of the contract. Such work shall:

(i) Be due to differences between anticipated and actual field conditions,

(ii) Be necessary to construct Specified Roads to design standards, or

(iii) Be necessary to assure stability of Specified Roads.

(d) In addition, Contracting Officer may include work to protect resource values in ordered Design Changes. Such work must be related to construction of Specified Roads and be necessary to prevent damage to soil and water values immediately tributary to Specified Roads. Other Design Changes may be made by mutual written agreement.

(e) Forest Service shall revise Plans and specifications as necessary to meet new conditions. Quantities of work and/or materials determined from such revised Plans and specifications, together with quantities of work and/or materials abandoned, shall be the basis for adjusting the Specified Road construction cost.

(f) Forest Service shall determine the difference in quantities for the portion of Specified Road affected by Design Change by comparing the most recent previous quantities with the total of:

(i) Estimated quantities actually constructed prior to Design Change and

(ii) Estimated quantities to be constructed following Design Change.

(g) Calculate the amount of adjustment to the Specified Road construction cost by applying:

(i) Current Unit Rates to difference when quantities increase and

(ii) Unit rates comparable to those used in computing most recent cost estimates of the timber sale when quantities decrease.

(h) When quantity of authorized work to be performed or material furnished by Purchaser, under any item shown in the Schedule of Items, is reduced to less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost of such work and adjust the Specified Road construction cost. Any revised estimate shall use the same procedures as those used in original estimates using rates comparable to those used in the most recent cost estimate for the timber sale. The revised estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

BT5.26 Alternate Facilities. If under Purchaser's Operating Schedule, roads needed for the removal of Included Timber differ substantially from Specified Roads, other roads may be added to AT7. Contracting Officer shall assure that road routing, location, design, and needed easements will make such other roads acceptable as parts of the National Forest transportation facilities. Purchaser shall provide survey, design, and construction staking for such other roads.

Based on design quantities from such engineering, Forest Service shall estimate Specified Road construction costs of alternate facilities, using methods consistent with those used in the original computation of the Schedule of Items. If Specified Road construction costs for acceptable alternate facilities are less than the estimated costs of facilities listed in the original Schedule of Items that Purchaser does not construct, Timber Sale Account shall be adjusted by Forest Service to reflect the reduction in costs. In event of rate redetermination under BT3.3, such allowed costs shall be the redetermined estimated costs of facilities listed in the original Schedule of Items that Purchaser does not construct.

BT5.27 Temporary Credit for Unamortized Specified Road Construction Cost. When, under BT8.33, Contracting Officer orders a delay or interruption of Purchaser's Operations for more than 30 days when scheduled operations would be occurring but for the order, the Contracting Officer shall credit the unamortized cost of Specified Roads to Purchaser's Timber Sale Account, upon the written request of Purchaser or at the discretion of Contracting Officer. The amount credited to Purchaser shall be limited to stumpage paid above Base Rates.

Any Specified Road construction cost credited to Purchaser pursuant to this Subsection may be refunded or transferred at the request of Purchaser. However, if Purchaser has outstanding debt owed the United States,

Contracting Officer must apply the amount of credit that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act of 1996, as amended.

Upon written notice from Contracting Officer that the basis for the delay or interruption no longer exists, Purchaser shall pay for timber a per unit amount, in addition to Current Contract Rates, that is equal to the amount credited to Purchaser's Timber Sale Account divided by 80 percent of the estimated remaining volume of the contract, until the full amount credited to Purchaser has been returned.

BT5.3 Road Maintenance. Purchaser shall maintain roads, commensurate with Purchaser's use, in accordance with Road Maintenance Requirements in CT5.31 and the Road Maintenance Specifications. Performance of road maintenance work by Purchaser may be required prior to, during, or after each period of use. The timing of work accomplishment shall be based on Purchaser's Operating Schedule under BT6.31.

When two or more commercial users are simultaneously using the same road where Forest Service is not requiring maintenance deposits, the commercial users will develop maintenance responsibilities and arrangements for accomplishing the work. Forest Service must agree to this plan. If the commercial users cannot agree on maintenance responsibilities, Forest Service shall resolve the differences.

If Purchaser elects to use different roads than those listed in CT5.31, Forest Service shall determine Purchaser's commensurate share of road maintenance and revise road maintenance deposits in CT5.32.

If Forest Service cannot perform its full commensurate share of road maintenance, Forest Service shall make a cash payment to Purchaser for performance of such work.

Unless agreed in writing, prehaul maintenance shall be completed on any portion of road prior to hauling on that portion. Maintenance, as used in this contract, does not include road reconstruction or repairs of an extraordinary nature.

BT5.4 Use by Others. Forest Service shall have the right to use any road constructed by Purchaser under this contract for any and all purposes in connection with the protection and administration of the National Forest. Other parties, in connection with the logging of tributary National Forest timber, may use roads constructed by Purchaser hereunder when Contracting Officer determines that such use will not materially interfere with Purchaser's Operations. Third party use shall be contingent upon Contracting Officer determining, and third party agreeing to pay, a fair share of maintenance cost commensurate with such commercial use.

Unless otherwise provided in CT5.4, Forest Service shall authorize other uses of roads constructed by Purchaser hereunder only if:

(a) Contracting Officer makes appropriate arrangements to relieve Purchaser of related maintenance costs commensurate with such other uses and

(b) Such other uses will not materially interfere with Purchaser's Operations.

Where Purchaser reconstructs a road having established use, Purchaser's use during reconstruction and thereafter shall be such as to reasonably accommodate such established use. Contracting Officer shall ensure that other users do not materially interfere with Purchaser's right to use such reconstructed road.

BT6.0—OPERATIONS

BT6.1 Representatives. Unless otherwise agreed, Purchaser shall designate, in writing, a representative who is authorized to receive notices in regard to performance under this contract and take related action. In no case shall Purchaser designate any representative to this contract who is currently debarred, proposed for debarment, or suspended by the Federal Government. Purchaser's representative shall provide a copy of the contract to Purchaser's field supervisor and persons authorized to assume responsibilities in the field supervisor's absence. Prior to initial operations and after shutdowns of 10 days or more, Purchaser's representative shall notify Forest Service 2 days, excluding weekends and Federal holidays before any operations begin on Sale Area.

Purchaser's representative shall designate, in writing, a field supervisor, one of whose responsibilities shall be on-the-ground direction and supervision of Purchaser's Operations. The field supervisor shall be readily available to the area of operations when operations are in progress and shall be authorized to receive notices in regard to performance under this contract and take related action. The responsibilities of the field supervisor shall include the safeguarding of National Forest resources and performance within the terms of the contract. Purchaser representative will furnish Forest Service with names of persons authorized to assume responsibilities in field supervisor's absence. Such delegations may be made a part of Purchaser's annual Operating Schedule under BT6.31.

Unless Contracting Officer designates another Forest Service representative and notifies Purchaser in writing, the District Ranger is the representative of Forest Service. Forest Service representative shall:

(a) Receive notice in regard to performance under this contract,

(b) Take action in relation to this contract, and

(c) Be readily available to the area of construction and logging operations.

Contracting Officer or Forest Service representative shall designate other on-the-ground representatives in writing along with their specific contractual responsibilities and authority. Representatives with authority delegated in writing are the only Forest Service personnel authorized to provide notice or take related actions under the contract. Such delegation shall be made within 30 days of receipt of Purchaser's Plan of Operations.

BT6.11 Notices. Notices by either party as to action taken or to be taken by the other respecting this contract shall be made in writing to the other party's designated representative.

BT6.2 Improvements. Purchaser is authorized to construct on National Forest land, buildings, facilities, and other improvements needed to log Included Timber. Such construction shall be located where approved in writing by Forest Service and shall be constructed and used in a manner that will protect National Forest values.

Purchaser shall comply with the rules and regulations governing the operation of premises that are occupied and shall perform the contract in a manner that will not interrupt or interfere with the conduct of Forest Service business.

Forest Service shall grant written permission before any camp, quarry, borrow pit, storage, or service area, other than as shown on Plans, is opened or operated on National Forest land or administered lands. A camp is interpreted to include the campsite or trailer parking area of any employee, agent contractor, Subcontractor or their employees or agents working on the project for Purchaser. Such permission, if granted, shall be without charge to Purchaser.

BT6.21 Removal. Unless Forest Service authorizes continued use, Purchaser shall remove or dispose of all improvements when no longer needed. Should Purchaser fail to remove or dispose of improvements within 6 months after Termination Date, Forest Service may dispose of improvements at Purchaser's expense under BT9.5 or may, upon written notice to Purchaser, assume title to improvements in the name of the United States. In the latter event, Purchaser shall not be required to remove such improvements.

BT6.22 Protection of Improvements. So far as practicable, Purchaser shall protect Specified Roads and other improvements (such as roads, trails, telephone lines, ditches, and fences):

- (a) Existing in the operating area,
- (b) Determined to have a continuing need or use, and
- (c) Designated on Sale Area Map.

Purchaser shall keep roads and trails needed for fire protection or other purposes and designated on Sale Area Map reasonably free of equipment and products, slash, and debris resulting from Purchaser's Operations. Purchaser shall make timely restoration of any such improvements damaged by Purchaser's Operations and, when necessary because of such operations, shall move such improvements, as specified in CT6.22.

BT6.221 Protection of Improvements Not Owned by Forest Service. Forest Service will notify all utility companies, or other parties affected, and make arrangements for all necessary adjustments of the public utility fixtures, pipelines, and other appurtenances likely to be affected by Purchaser's Operations.

When Purchaser's Operations are adjacent to properties of railway, telephone, or power companies, or other property, work shall not begin until Purchaser has identified actions necessary to prevent damage.

Purchaser shall cooperate with the owners of any underground or overhead utility lines in their removal and/or rearrangement operations in order that these operations may progress in a reasonable manner, utility duplication

or rearrangement work may be reduced to a minimum, and services shall not be unnecessarily interrupted.

In the event of interruption to utility services because of accidental breakage or as a result of lines being exposed or unsupported, Purchaser shall promptly notify the proper authority and shall cooperate with that authority in the restoration of service until the service is restored.

When materials are to be hauled across the tracks of any railway, Forest Service will make arrangements with the railroad for the use of any existing crossing or for any new crossing required. Purchaser shall make arrangements for use of alternate crossings. All construction work to be performed by Purchaser on the railroad right-of-way shall not damage railroad company's property.

BT6.222 Protection of Property. In construction and reconstruction of Specified Roads, Purchaser shall not unnecessarily remove, deface, injure, or destroy trees, shrubs, or other natural features, unless specifically authorized. To the extent practicable, Purchaser shall confine operations to within the clearing limit or other areas designated in the contract and prevent the depositing of rocks, excavated materials, stumps, or other debris outside these limits.

Material that falls outside these limits shall be retrieved, disposed of, or incorporated in the work to the extent practicable and necessary to protect adjacent resource values, unless otherwise agreed.

BT6.23 Protection of Land Survey Monuments. Forest Service shall appropriately designate on the ground all known survey monuments, section corners, and other corner accessories. Forest Service shall post identifying signs on two sides of each known bearing tree.

Forest Service shall arrange protective or perpetuate action that does not cause unnecessary delay to Purchaser in authorized clearings, such as Clearcutting Units and road construction, and in other instances where damage to monuments, section corners, and other corner accessories is unavoidable.

Purchaser shall protect all known survey monuments, witness corners, reference monuments, and bearing trees against avoidable destruction, obliteration, or damage during Purchaser's Operations. If any known monuments, corners, or accessories are destroyed, obliterated, or damaged by Purchaser's Operations, Purchaser shall hire the appropriate county surveyor or a registered land surveyor to reestablish or restore at the same location the monuments, corners, or accessories. Such surveyors shall use procedures in accordance with the Bureau of Land Management "Manual of Instructions for the Survey of the Public Lands of the United States" for General Land Office surveys and in accordance with State law for others. Purchaser shall record such survey in appropriate county records.

BT6.24 Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources. (a) Areas, known by Forest Service prior to timber sale advertisement, needing special measures for the protection of plants, animals, cultural resources, and/or cave resources are shown on Sale Area Map

and/or identified on the ground, and shall be treated as follows:

(i) Unless agreed otherwise, wheeled or track laying equipment shall not be operated in areas identified as needing special measures except on roads, landings, tractor roads, or skid trails approved under BT5.1 or BT6.422. Purchaser may be required to backblade skid trails and other ground disturbed by Purchaser's Operations within such areas in lieu of cross ditching required under BT6.6. Additional special protection measures needed to protect such known areas are identified in CT6.24.

(ii) Unless agreed otherwise, trees will not be felled into areas identified as needing special measures.

(iii) Purchaser shall conduct operations in a manner that does not damage or disturb identified areas. In the event that protective measures identified by the Forest Service are for any reason inadequate, Contracting Officer may delay or interrupt Purchaser's operations, under this Contract, and/or modify this Contract pursuant to BT8.33.

(iv) Purchaser shall immediately notify the Forest Service if its operations disturb or damage any area identified as needing special protection, and shall immediately halt its operations in the vicinity of such area until the Forest Service authorizes continued operations. In the event that Purchaser's operations disturb or damage an area identified as needing special protection, then Purchaser shall reimburse the Forest Service for the full cost and expense of any evaluative and remedial measures undertaken by the Forest Service in connection with such disturbance or damage. Such payment shall not relieve Purchaser from civil or criminal liability under applicable law.

(b) Nothing contained in this Subsection shall establish, or be deemed to establish any express or implied warranty on the part of the Forest Service (i) that the Forest Service has identified all areas within the Sale Area requiring special protection, or (ii) that measures prescribed by the Forest Service for protection of such areas are adequate.

(c) Following sale advertisement, additional areas needing special measures for protection may be discovered or identified; protective measures may be revised or newly prescribed; and, additional species of plants and/or animals may be added to federal lists of protected species. In such event, Contracting Officer may delay or interrupt Purchaser's operations, under this Contract, and/or modify this Contract pursuant to BT8.33.

(d) Discovery, by either the Purchaser or the Forest Service, of additional areas, resources, species, or members of species needing special protection shall be promptly reported to the other party.

BT6.3 Control of Operations. Under this contract, "Purchaser's Operations" shall include activities of or use of equipment of Purchaser, Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents, acting in the course of their employment in operations hereunder on National Forest lands or within

Forest Service protection boundary (unless acting under the immediate supervision of Forest Service).

Purchaser's Operations shall be conducted in a workmanlike and orderly manner. The timing of required Forest Service designation of work on the ground and the performance of other Forest Service work shall not be such as to cause unnecessary delay to Purchaser.

"Release for Cutting" is written authorization to Purchaser to begin cutting in a Payment Unit. Upon Purchaser's request for release of a Payment Unit, Forest Service shall either:

(a) Give tentative approval and bill Purchaser as necessary under BT4.21 or

(b) Reject the request, stating reasons for rejection.

When payment or payment guarantee has been confirmed, Forest Service shall issue Release for Cutting within 10 days. Purchaser shall not cut timber in any Payment Unit until it is Released for Cutting.

BT6.31 Operating Schedule. Purchaser shall, before commencing operations, provide in writing an annual Operating Schedule of anticipated major activities and needs for logging Included Timber, such as logging, road maintenance, and construction, including construction staking under BT5.212 and material delivery under BT5.22. Upon reasonable notice to Forest Service, such schedule shall be subject to modifications necessitated by weather, markets, or other unpredictable circumstances.

Subject to BT6.6 and when the requirements of BT6.66 are met, Purchaser's Operations may be conducted outside Normal Operating Season. "Normal Operating Season" is the period(s) beginning and ending on the dates stated in AT13 of any year.

BT6.311 Plan of Operations. For timber sales with 2 or more years between award date and Termination Date, within 60 days of final award of contract, Purchaser shall furnish Forest Service a written general Plan of Operations that shall be in addition to the annual Operating Schedule required under BT6.31. The Plan of Operations shall set forth planned periods for and methods of road construction, timber harvesting, and completion of slash disposal, erosion control measures, and other contractual requirements. Forest Service written approval of the Plan of Operations is prerequisite to commencement of Purchaser's Operations. Purchaser may revise this Plan of Operations when necessitated by weather, markets, or other unpredictable circumstances, subject to approval of Contracting Officer. In the event of delays beyond the control of Purchaser that qualify for Contract Term Adjustment, the Plan of Operations shall be adjusted by mutual agreement to accommodate the adjusted contract period.

BT6.312 Plan of Operations for Road Construction. Annually, prior to start of construction, Purchaser shall submit a supplement to the Plan of Operations that shall include a schedule of proposed progress and a description of planned measures to be taken to provide erosion control for work in progress, including special measures to be taken on any segments of construction not Substantially Completed prior to periods of seasonal precipitation or runoff. Purchaser shall submit a

revised schedule when Purchaser proposes a significant deviation from the progress schedule.

Prior to beginning construction on any portion of Specified Roads identified as sensitive on Plans, Purchaser and Forest Service shall agree on proposed method of construction.

BT6.32 Protection of Residual Trees. Purchaser's Operations shall not unnecessarily damage young growth or other trees to be reserved.

BT6.33 Safety. Purchaser's Operations shall facilitate Forest Service's safe and practical inspection of Purchaser's Operations and conduct of other official duties on Sale Area. Purchaser has all responsibility for compliance with safety requirements for Purchaser's employees.

In the event that Contracting Officer identifies a conflict between the requirements of this contract or agreed upon methods of proceeding hereunder and State or Federal safety requirements, the contract shall be modified and Purchaser may request an adjustment in Current Contract Rates to compensate for the changed conditions.

Unless otherwise agreed in writing, when Purchaser's Operations are in progress adjacent to or on Forest Service controlled roads and trails open to public travel, Purchaser shall furnish, install, and maintain all temporary traffic controls that provide the user with adequate warning of hazardous or potentially hazardous conditions associated with Purchaser's Operations. Purchaser and Forest Service shall agree to a specific Traffic Control Plan for each individual project prior to commencing operations. Devices shall be appropriate to current conditions and shall be covered or removed when not needed. Except as otherwise agreed, flagmen and devices shall be as specified in the "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD) and as shown on Plans, Sale Area Map, Traffic Control Plan, or in specifications attached hereto.

BT6.34 Sanitation and Servicing. Purchaser shall take all reasonable precautions to prevent pollution of air, soil, and water by Purchaser's Operations. If facilities for employees are established on Sale Area, they shall be operated in a sanitary manner. In the event that Purchaser's Operations or servicing of equipment result in pollution to soil or water, Purchaser shall conduct cleanup and restoration of the polluted site to the satisfaction of Forest Service.

Purchaser shall maintain all equipment operating on Sale Area in good repair and free of abnormal leakage of lubricants, fuel, coolants, and hydraulic fluid. Purchaser shall not service tractors, trucks, or other equipment on National Forest lands where servicing is likely to result in pollution to soil or water. Purchaser shall furnish oil-absorbing mats for use under all stationary equipment or equipment being serviced to prevent leaking or spilled petroleum-based products from contaminating soil and water resources. Purchaser shall remove from National Forest lands all contaminated soil, vegetation, debris, vehicle oil filters (drained of free-flowing oil), batteries, oily

bags, and waste oil resulting from use, servicing, repair, or abandonment of equipment.

BT6.341 Prevention of Oil Spills. If Purchaser maintains storage facilities for oil or oil products on Sale Area, Purchaser shall take appropriate preventive measures to ensure that any spill of such oil or oil products does not enter any stream or other waters of the United States or any of the individual States.

If the total oil or oil products storage exceeds 1,320 gallons in containers of 55 gallons or greater, Purchaser shall prepare a Spill Prevention Control and Countermeasures Plan. Such plan shall meet applicable EPA requirements (40 CFR 112), including certification by a registered professional engineer.

Purchaser shall notify Contracting Officer and appropriate agencies of all reportable (40 CFR 110) spills of oil or oil products on or in the vicinity of Sale Area that are caused by Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents directly or indirectly, as a result of Purchaser's Operations. Purchaser will take whatever initial action may be safely accomplished to contain all spills.

BT6.342 Hazardous Substances. Purchaser shall notify the National Response Center and Contracting Officer of all releases of reportable quantities of hazardous substances on or in the vicinity of Sale Area that are caused by Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents, directly or indirectly, as a result of Purchaser's Operations, in accordance with 40 CFR 302.

BT6.35 Equipment Cleaning. (a) Areas, known by Forest Service prior to timber sale advertisement, that are infested with invasive species of concern are shown on Sale Area Map. A current list of invasive species of concern and a map showing the extent of known infestations is available at the Forest Supervisor's Office. For purposes of this provision, "Off-Road Equipment" includes all logging and construction machinery, except for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars, and similar vehicles.

(b) Purchaser shall adhere to the following requirements with regard to cleaning "Off-Road Equipment":

(i) Prior to moving Off-Road Equipment onto the Sale Area, Purchaser shall identify the location of the equipment's most recent operation. Purchaser shall not move any Off-Road Equipment that last operated in an area infested with one or more invasive species of concern onto Sale Area without having cleaned such equipment of seeds, soil, vegetative matter, and other debris that could contain or hold seeds, and having notified Forest Service, as provided in (iii). If the location of prior operation cannot be identified, then Purchaser shall assume that the location is infested with invasive species of concern.

(ii) Prior to moving Off-Road Equipment from a cutting unit that is shown on Sale Area Map to be infested with invasive species of concern to, or through any other area that is shown as being free of invasive species of

concern, or infested with a different invasive species, Purchaser shall clean such equipment of seeds, soil, vegetative matter, and other debris that could contain or hold seeds, and shall notify the Forest Service, as provided in (iii).

(iii) Prior to moving any Off-Road Equipment subject to the cleaning requirements set forth above, Purchaser shall advise Forest Service of its cleaning measures and make the equipment available for inspection. Forest Service shall have 2 days, excluding weekends and Federal holidays, to inspect equipment after it has been made available. After satisfactory inspection or after such 2 day period, Purchaser may move the equipment as planned. Equipment shall be considered clean when a visual inspection does not disclose seeds, soil, vegetative matter, and other debris that could contain or hold seeds. Purchaser shall not be required to disassemble equipment unless so directed by the Forest Service after inspection.

(iv) If Purchaser desires to clean Off-Road Equipment on National Forest land, such as at the end of a project or prior to moving to, or through an area that is free of invasive species of concern, Purchaser shall obtain prior approval from Contracting Officer as to the location for such cleaning and measures, if any, for controlling impacts.

(v) Contracting Officer may order delay, interruption, or modification of this Contract pursuant to BT8.33.

(c) Nothing contained in this Subsection shall be interpreted as creating any warranty on the part of the Forest Service that all locations of invasive species of concern have been described herein, elsewhere in this Contract, or designated on the ground. Following sale advertisement, additional locations may be described or designated, and other species may be added to the list of invasive species of concern. In such event, Contracting Officer may order delay, interruption, or modification of this Contract pursuant to BT8.33.

(d) The parties shall promptly communicate with one another with respect to description or designation of additional locations; discovery of locations of new species or new infestation; and, addition of species to the list of invasive species of concern.

BT6.36 Acceptance of Work. Upon Purchaser's written request and assurance that work has been completed, Forest Service shall perform an inspection within 5 days, excluding weekends and Federal holidays, so as not to delay unnecessarily the progress of Purchaser's Operations. Such a request may be for acceptance of:

(a) Any reasonable portion of Specified Road listed in the Schedule of Items;

(b) Specific requirements on a Payment Unit (such as logging, slash disposal, erosion control, or snag felling); or

(c) All contract requirements on a Payment Unit.

Forest Service may perform such inspections without request from Purchaser.

Within 2 days of inspection, excluding weekends and Federal holidays, Forest Service shall furnish Purchaser

with written notice either of acceptance or of work remaining to be done.

In the event that Forest Service is unable to make such inspection within 5 days of Purchaser's request, Purchaser shall be notified in writing of necessity for postponement and time when inspection can be made. The same final approval procedure shall be used at the end of Purchaser's construction period on any completed portion of road.

When all contractual work of Purchaser has been accepted for any Payment Unit or cutting unit identified on Sale Area Map, Payment Unit or cutting unit shall be eliminated from Sale Area on written notice of either party to this contract.

BT6.361 Acceptance of Specified Roads.

Specified Road work may be accepted subject to completion of clearing work that does not affect the road structure when completion is delayed for reasons beyond control of Purchaser, such as adverse weather.

Specified Road work may be accepted subject to completion of planting and seeding for soil stabilization when completion is delayed for reasons beyond control of Purchaser, such as seasonal limitations. Purchaser shall complete planting or seeding on such road during the next suitable planting season.

Specified Road work may be conditionally accepted prior to the application of dust palliatives when application is not necessary to prevent dusting of the road surface due to climatic conditions. Purchaser shall apply dust palliative on such roads prior to use during periods when dusting may occur.

Prior to request for final inspection, Specified Road work, roadways, borrow pits, and quarries, occupied and no longer needed by Purchaser in connection with Purchaser's Operations, shall be cleared of all rubbish, excess materials, and temporary structures.

BT6.4 Conduct of Logging. Unless otherwise specifically provided herein, Purchaser shall fell trees designated for cutting and shall remove the portions that meet Utilization Standards, as provided in BT2.2, prior to acceptance of Payment Unit for completion of logging under BT6.36. Forest Service may make exceptions for occasional trees inadvertently not cut or trees or pieces not removed for good reason, including possible damage to forest resources or gross economic impracticability at the time of removal of other timber. Logging shall be conducted in accordance with the following, unless CT6.4 provisions set forth requirements to meet special or unusual logging conditions:

BT6.41 Felling and Bucking. Felling shall be done to minimize breakage of Included Timber and damage to residual timber. Unless agreed otherwise, felling shall be done by saws or shears. Bucking shall be done to permit removal of all minimum pieces set forth in AT2. Purchaser may buck out cull material when necessary to produce pieces meeting Utilization Standards. Such bucked out material shall contain a minimum amount of sound wood, not in excess of the net Measure in percentage of gross Measure, or based on the merchantability factor, whichever is stated in AT2. If necessary to assess

extent of defect, Purchaser shall make sample saw cuts or wedges.

BT6.411 Felling in Clearings. Insofar as ground conditions, tree lean, and shape of clearings permit, trees shall be felled so that their tops do not extend outside Clearcutting Units, construction clearings, and areas of regeneration cutting.

BT6.412 Stump Heights. Stumps shall not exceed, on the side adjacent to the highest ground, the maximum heights set forth in AT6, except that occasional stumps of greater heights are acceptable when Purchaser determines that they are necessary for safe and efficient conduct of logging. Unless otherwise agreed, Purchaser shall re-cut high stumps so they will not exceed heights specified in AT6 and shall dispose of severed portions in the same manner as other logging debris. The stump heights shown in AT6 were selected with the objective of maximum reasonable utilization of the timber, unless Sale Area Map shows special areas where stump heights are lower for aesthetic, land treatment, or silvicultural reasons.

BT6.413 Limbing. When Forest Service determines it is necessary to minimize damage to the residual stand during skidding, Purchaser shall cut exposed limbs from products prior to skidding. Purchaser may leave uncut those limbs that cannot be cut with reasonable safety.

BT6.42 Skidding and Yarding. Methods of skidding or yarding specified for particular areas, if any, are indicated on Sale Area Map. Outside Clearcutting Units and construction clearings, insofar as ground conditions permit, products shall not be skidded against reserve trees or groups of reproduction and tractors shall be equipped with a winch to facilitate skidding.

BT6.421 Rigging. Insofar as practicable, needed rigging shall be slung on stumps or trees designated for cutting.

BT6.422 Landings and Skid Trails. Location of all landings, tractor roads, and skid trails shall be agreed upon prior to their construction. The cleared or excavated size of landings shall not exceed that needed for efficient skidding and loading operations.

BT6.423 Skidding on Roads. Products may be skidded on permanent roads authorized for hauling under BT5.12 only by prior written agreement.

BT6.424 Arches and Dozer Blades. Unless otherwise specified in CT6.424, skidding tractors equipped with pull-type arches or dozer blades wider than tractor width or C-frame width, whichever is greater, shall not be used in residual timber outside Clearcutting Units and other authorized clearings, except on constructed tractor roads or landings, unless there is written agreement that residual timber will not be damaged materially by such use.

BT6.5 Streamcourse Protection. "Streamcourses" that are subject to provisions of this Section are shown on Sale Area Map. Unless otherwise agreed, the following measures shall be observed to protect Streamcourses:

(a) Purchaser's Operations shall be conducted to prevent debris from entering Streamcourses, except as

may be authorized under paragraph (d). In event Purchaser causes debris to enter Streamcourses in amounts that may adversely affect the natural flow of the stream, water quality, or fishery resource, Purchaser shall remove such debris as soon as practicable, but not to exceed 2 days, and in an agreed manner that will cause the least disturbance to Streamcourses.

(b) Culverts or bridges shall be required on Temporary Roads at all points where it is necessary to cross Streamcourses. Such facilities shall be of sufficient size and design and installed in a manner to provide unobstructed flow of water and to minimize damage to Streamcourses. Trees or products shall not be otherwise hauled or yarded across Streamcourses unless fully suspended.

(c) Wheeled or track-laying equipment shall not be operated in Streamcourses, except at crossings designated by Forest Service or as essential to construction or removal of culverts and bridges.

(d) Flow in Streamcourses may be temporarily diverted only if such diversion is necessary for Purchaser's planned construction and Forest Service gives written authorization. Such flow shall be restored to the natural course as soon as practicable and, in any event, prior to a major storm runoff period or runoff season.

BT6.6 Erosion Prevention and Control. Purchaser's Operations shall be conducted reasonably to minimize soil erosion. Equipment shall not be operated when ground conditions are such that excessive damage will result. Purchaser shall adjust the kinds and intensity of erosion control work done to ground and weather conditions and the need for controlling runoff. Erosion control work shall be kept current immediately preceding expected seasonal periods of precipitation or runoff.

If Purchaser fails to do seasonal erosion control work prior to any seasonal period of precipitation or runoff, Forest Service may temporarily assume responsibility for the work and any unencumbered deposits hereunder may be used by Forest Service to do the work. If needed for such work, Purchaser shall make additional deposits on request by Forest Service. Any money deposited or used for this purpose shall be treated as cooperative deposits under BT4.218.

BT6.61 Meadow Protection. Reasonable care shall be taken to avoid damage to the cover, soil, and water in meadows shown on Sale Area Map. Vehicular or skidding equipment shall not be used on meadows, except where roads, landings, and tractor roads are approved under BT5.1 or BT6.422. Unless otherwise agreed, trees felled into meadows shall be removed by endlining. Resulting logging slash shall be removed where necessary to protect cover, soil, and water.

BT6.62 Wetlands Protection. Wetlands requiring protection under Executive Order 11990 are shown on Sale Area Map. Vehicular or skidding equipment shall not be used in such wetlands, except where roads, landings, and tractor roads are approved under BT5.1 or BT6.422. Additional measures needed to protect such areas are provided in CT6.62.

BT6.63 Temporary Roads. As necessary to attain stabilization of roadbed and fill slopes of Temporary Roads, Purchaser shall employ such measures as out-sloping, drainage dips, and water-spreading ditches.

After a Temporary Road has served Purchaser's purpose, Purchaser shall give notice to Forest Service and shall remove bridges and culverts, eliminate ditches, out-slope roadbed, remove ruts and berms, effectively block the road to normal vehicular traffic where feasible under existing terrain conditions, and build cross ditches and water bars, as staked or otherwise marked on the ground by Forest Service. When bridges and culverts are removed, associated fills shall also be removed to the extent necessary to permit normal maximum flow of water.

BT6.631 Temporary Roads to Remain Open. To maintain short term access to portions of Sale Area for post-sale treatments and other purposes after a Temporary Road has served Purchaser's purpose, pursuant to BT6.63, Purchaser agrees, that on Temporary Roads designated on Sale Area Map as "Remain Open," to construct cross ditches and water bars, as designated, staked, or otherwise directed by Forest Service, that can be traversed by a normal two-wheel drive pickup truck. On "Remain Open" Temporary Roads, all bridges and culverts shall remain in place and ditches shall not be eliminated. All drainage structures shall be left in functional condition.

BT6.64 Landings. After landings have served Purchaser's purpose, Purchaser shall ditch and slope them to permit water to drain or spread. Unless agreed otherwise, cut and fill banks around landings shall be sloped to remove overhangs and otherwise minimize erosion.

BT6.65 Skid Trails and Fire Lines. Purchaser shall construct cross ditches and water-spreading ditches on tractor roads and skid trails, where staked or otherwise marked on the ground by Forest Service. Forest Service shall designate cross ditching on Purchaser-built fire lines prior to or during construction. By agreement, Purchaser may use other comparable erosion control measures, such as backblading skid trails, in lieu of cross ditching.

BT6.66 Current Operating Areas. Where logging or road construction is in progress but not completed, unless agreed otherwise, Purchaser shall, before operations cease annually, remove all temporary log culverts and construct temporary cross drains, drainage ditches, dips, berms, culverts, or other facilities needed to control erosion.

Such protection shall be provided, prior to end of a Normal Operating Season, for all disturbed, unprotected ground that is not to be disturbed further prior to end of operations each year, including roads and associated fills, tractor roads, skid trails, and fire lines. When weather permits operations after Normal Operating Season, Purchaser shall keep such work on any additional disturbed areas as up to date as practicable.

BT6.67 Erosion Control Structure Maintenance. During the period of this contract, Purchaser shall provide maintenance of soil erosion control structures constructed by Purchaser until they become stabilized,

but not for more than 1 year after their construction. Contracting Officer may agree to perform such structure maintenance under BT4.218, if requested by Purchaser, subject to agreement on rates. Purchaser shall not be responsible for repair of such structures damaged by other National Forest users whose activities are not a part of Purchaser's Operations.

BT6.7 Slash Disposal. Purchaser's timing of product removal and preparatory work shall not unnecessarily delay slash disposal. Specific slash disposal measures to be employed by Purchaser are stated in CT6.7 and are in addition to Required Deposits for slash disposal.

BT6.8 Measuring. "Measuring" is the estimation of timber quantities using certain dimensions and applicable volume tables or formulae to determine the contents of trees or stands in a standard manner. Sampling may be on an individual tree or area basis. Examples of standard procedures are tree measurement, sample tree measurement, and area estimate. The quantity of timber designated or to be designated for cutting has been or shall be Measured, as specified in CT6.8.

BT6.81 Product Identification. Before removal from Sale Area, unless Contracting Officer determines that circumstances warrant a written waiver or adjustment, Purchaser shall:

(a) Hammer brand all products that are eight (8) feet or more in length and one-third (1/3) or more sound, on each end that is seven (7) inches or more in diameter.

(b) West of the 100th meridian, paint with a spot of highway-yellow paint all domestic processing products that are eight (8) feet or more in length and one-third (1/3) or more sound, on each end that is seven (7) inches or more in diameter. Each paint spot must be not less than three (3) square inches in size.

Contracting Officer shall assign brands and, if Sale Area is within a State that maintains a log brand register, brands shall be registered with the State. Purchaser shall use assigned brand exclusively on logs from this sale until Contracting Officer releases brand. Purchaser will furnish and apply highway-yellow paint of a lasting quality (oil-base or equivalent).

All hammer brands and/or highway-yellow paint must remain on logs until they are domestically processed. Purchaser shall replace identifying marks if they are lost, removed, or become unreadable. Purchaser may remanufacture products into different log lengths. Except for logs remanufactured as part of the mill in-feed process immediately before processing, remanufactured products must be rebranded with the assigned timber sale brand and repainted with highway-yellow paint, unless otherwise agreed to in writing by Contracting Officer. For such remanufactured products, Contracting Officer may approve use of a brand to be used exclusively as a catch brand, in lieu of the assigned timber sale brand.

BT6.9 Records. Upon request, Purchaser shall provide access to appropriate annual records in Purchaser's books and accounts to enable Forest Service to obtain and analyze accurate operating costs and selling price data for appropriate use in appraising Federal timber. Operating cost and selling price data shall include that

applicable for appraising timber obtained from Federal sources in or processed in the Region. Purchaser shall provide access to such data on behalf of subsidiary entities owned or controlled by Purchaser to the extent they participate in harvesting, manufacturing, or marketing timber into products recognized in National Forest timber appraisals in the area. To a like extent, Purchaser shall request in writing Purchaser's contractors and Subcontractors to make such data available to Forest Service.

Information so obtained shall be treated as confidential, as provided in regulations issued by the Secretary of Agriculture (7 CFR 1.12), and shall be available for review by parties from whom such data are obtained.

BT7.0—FIRE PRECAUTIONS AND CONTROL

BT7.1 Plans. Prior to initiating Purchaser's Operations during Fire Precautionary Period, Purchaser shall file with Forest Service a Fire Prevention and Control Plan providing for the prevention and control of fires on Sale Area and other areas of Purchaser's Operations. Such plan shall include a detailed list of personnel and equipment at Purchaser's disposal for implementing the plan. This requirement may be met by preparing a single plan for more than one timber sale.

BT7.2 Fire Precautions. Specific fire precautionary measures listed in CT7.2 shall be applicable during Purchaser's Operations in "Fire Precautionary Period" described in AT9. Contracting Officer may change the dates of Fire Precautionary Period by advance written notice, if justified by unusual weather or other conditions. Required tools and equipment shall be kept in serviceable condition and immediately available for fire fighting at all times during Purchaser's Operations in Fire Precautionary Period.

BT7.21 Substitute Precautions. Forest Service may authorize substitute measures or equipment, or waive specific requirements by written notice, if substitute measures or equipment will afford equal protection or some of the required measures and equipment are unnecessary.

BT7.22 Emergency Precautions. Forest Service may require the necessary shutting down of equipment on portions of Purchaser's Operations, as specified by the emergency fire precautions schedule of CT7.22. Under such conditions, after Purchaser ceases active operations, Purchaser shall release for hire by Forest Service, if needed, Purchaser's shutdown equipment for fire standby on Sale Area or other areas of Purchaser's Operations and personnel for fire standby or fire patrol, when such personnel and equipment are not needed by Purchaser for other fire fighting or protection from fire. Equipment shall be paid for at fire fighting equipment rates common in the area or at prior agreed rates and, if Purchaser requests, shall be operated only by personnel approved by Purchaser. Personnel so hired shall be subject to direction and control by Forest Service and shall be paid by Forest Service at fire fighting rates common in the area or at prior agreed rates.

BT7.3 Fire Control. Purchaser shall, both independently and in cooperation with Forest Service, take all reasonable and practicable action to prevent and suppress

fires resulting from Purchaser's Operations and to suppress any forest fire on Sale Area. Purchaser's independent initial fire suppression action on such fires shall be immediate and shall include the use of all necessary personnel and equipment at Purchaser's disposal on Sale Area or within the distance of Sale Area stated in AT10.

BT7.31 Purchaser's Reinforcement Obligations. Whenever an Operations Fire or Negligent Fire, whether on or off Sale Area, or any other forest fire on Sale Area, has not been suppressed by initial action and appreciable reinforcement strength is required, Forest Service may require further actions by Purchaser until such fire is controlled and mopped up to a point of safety. Such actions may include any or all of the following as necessary to fight such fire:

BT7.311 Suspend Operations. To suspend any or all of Purchaser's Operations.

BT7.312 Personnel. To release for employment by Forest Service any or all of Purchaser's personnel engaged in Purchaser's Operations or timber processing within the distance of Sale Area stated in AT10. Any organized crew so hired shall include Purchaser's supervisor, if any. Personnel so employed shall be paid at Forest Service standard emergency fire fighting rates.

BT7.313 Equipment. To make available for Forest Service rental at fire fighting equipment rates common in the area or at prior agreed rates any or all of Purchaser's equipment suitable for fire fighting and currently engaged in Purchaser's Operations within the distance of Sale Area stated in AT10. Equipment shall be operated only by personnel approved by Purchaser, if so requested by Purchaser.

BT7.4 Fire Suppression Costs. Purchaser's obligations for cost of fire suppression vary according to three classifications of fires as follows:

BT7.41 Operations Fire. An "Operations Fire" is a fire caused by Purchaser's Operations other than a Negligent Fire.

Forest Service, except as provided in BT7.3, shall use cooperative deposits under BT4.218 to perform fire suppression activities on Operations Fires. Purchaser agrees to reimburse Forest Service for such cost for each Operations Fire, subject to a maximum of the dollar amount stated in AT11. The cost of Purchaser's actions, supplies, and equipment on any such fire provided pursuant to BT7.3, or otherwise at the request of Forest Service, shall be credited toward such maximum. If Purchaser's actual cost exceeds Purchaser's obligation stated in AT11, Forest Service shall reimburse Purchaser for the excess.

BT7.42 Negligent Fire. A "Negligent Fire" is a fire caused by negligence or fault of Purchaser's Operations, including, but not limited to, one caused by smoking by persons engaged in Purchaser's Operations during the course of their employment, or during rest or lunch periods; or if Purchaser's failure to comply with the requirements of BT7.2 and BT7.3 results in a fire starting or permits a fire to spread. Damages and the cost of suppressing Negligent Fires shall be borne by Purchaser.

BT7.43 Other Fires on Sale Area. Forest Service shall pay Purchaser, at fire fighting rates common in the area or at prior agreed rates, for equipment or personnel furnished by Purchaser pursuant to BT7.3, or otherwise at the request of Forest Service, on any fire on Sale Area other than an Operations Fire or a Negligent Fire.

BT7.5 State Law. Purchaser shall not be relieved by the terms of this contract of any liability to the United States for fire suppression costs recoverable in an action based on State law, except for such costs resulting from Operations Fires. Amounts due Purchaser for fire fighting expenditures in accordance with BT7.41 shall not be withheld pending settlement of any such claim or action based on State law.

BT7.6 Performance by Contractor. Where Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents perform Purchaser's Operations in connection with fire responsibilities, Purchaser's obligations shall be the same as if performance was by Purchaser.

BT8.0—OTHER CONDITIONS

BT8.1 Title and Liability.

BT8.11 Title Passage. All right, title, and interest in and to any Included Timber shall remain in Forest Service until it has been Measured, removed from Sale Area or other authorized cutting area, and paid for, at which time title shall vest in Purchaser. For purposes of this Subsection, timber in Payment Units Released for Cutting covered by cash deposit or payment guarantee under BT4.3 shall be considered to have been paid for. Title to any Included Timber that has been Measured and paid for, but not removed from Sale Area or other authorized cutting area by Purchaser on or prior to Termination Date, shall remain in Forest Service.

BT8.12 Liability for Loss. If Included Timber is destroyed or damaged by an unexpected event that significantly changes the nature of Included Timber, such as fire, wind, flood, insects, disease, or similar cause, the party holding title shall bear the timber value loss resulting from such destruction or damage; except that such losses caused by insect or disease after felling of timber shall be borne by Purchaser, unless Purchaser is prevented from removing such timber for reasons that would qualify for Contract Term Adjustment. Deterioration or loss of value of salvage timber is not an unexpected event, except for deterioration due to delay or interruption that qualifies for Contract Term Adjustment or under BT8.33.

In the event Included Timber to which Forest Service holds title is destroyed, Purchaser will not be obligated to remove and pay for such timber. In the event Included Timber to which Forest Service holds title is damaged, Contracting Officer shall make an appraisal to determine for each species the difference between the appraised unit value of Included Timber immediately prior to the value loss and the appraised unit value of timber after the loss. Current Contract Rates in effect at the time of the

value loss shall be adjusted by differences to become the redetermined rates.

There shall be no obligation for Forest Service to supply, or for Purchaser to accept and pay for, other timber in lieu of that destroyed or damaged. This Subsection shall not be construed to relieve either party of liability for negligence.

BT8.2 Period of Contract. All obligations of Purchaser shall be discharged not later than "Termination Date" stated in AT12, unless it is adjusted pursuant to BT8.21 or BT8.212 or extended pursuant to BT8.23 or BT8.32, excepting only those obligations for which Forest Service has given written permission to delay performance. Such written permission shall be considered a Contract Term Adjustment for the purpose of Purchaser completing performance of obligations covered by such permission.

BT8.21 Contract Term Adjustment. "Contract Term Adjustment" means adjustment only as provided for in the three circumstances described in this Subsection. Under these circumstances, the contract term shall be adjusted in writing to include additional calendar days in one or more Normal Operating Seasons equal to the actual time lost, except as limited by paragraph (b) in this Subsection.

To qualify for such adjustment, Purchaser shall give written notice of the lost time not later than 30 days after end of Normal Operating Season in which time was lost and at least 10 days before Termination Date. Contracting Officer shall make prompt written acknowledgment of such notice, indicating concurrence with the number of days in the notice or the number of days Forest Service considers as qualifying for the adjustment. Lost portions of days shall be disregarded in computing time lost. The three circumstances qualifying for a Contract Term Adjustment are:

(a) Purchaser experiences delay in starting scheduled operations or interruptions in active operations, either of which stops removal of Included Timber from Sale Area through curtailment in felling and bucking, yarding, skidding and loading, hauling, or road construction, as scheduled under BT6.31, for 10 or more consecutive days during a Normal Operating Season due to causes beyond Purchaser's control, including, but not limited to, acts of God, acts of the public enemy, acts of the Government, labor disputes, fires, insurrections, or floods.

(b) Causes described in paragraph (a) substantially affect the disposition or processing of Included Timber during Normal Operating Season through their effects on primary timber processing facilities, with a resulting delay of 60 days or more in use of such facilities. In such event, Contract Term Adjustment shall not extend for more than 12 consecutive months.

(c) (i) Contracting Officer requests Purchaser, in writing, to delay or interrupt operations during the Normal Operating Season for any purpose other than suspension under BT4.4 or BT9.3 or

(ii) Purchaser suffers a delay or interruption of Purchaser's Operations affecting skidding, yarding,

and loading because of fire emergency closure ordered by Forest Service (or another agency in its behalf), and the total of such lost time is 10 or more days during any Normal Operating Season.

If Termination Date is adjusted, as described in this Subsection, and later extended under BT8.23, the appraisal for the extension shall be made as of the unadjusted Termination Date, but the date on which the new rates become effective, if higher than Current Contract Rates immediately prior to Termination Date, shall be the adjusted Termination Date.

BT8.211 Delay in Reconstruction of Processing Facilities. Notwithstanding the 12-month limitation in BT8.21, if Purchaser demonstrates a diligent effort has been made to replace primary timber processing facilities and that delays in doing so have been beyond Purchaser's control, Contracting Officer may authorize Contract Term Adjustment up to a total of 24 months.

BT8.212 Market-Related Contract Term Addition. The term of this contract may be adjusted when a drastic reduction in wood product prices has occurred in accordance with 36 CFR 223.52. The Producer Price Index used to determine when a drastic reduction in price has occurred is stated in AT17. Purchaser will be notified whenever the Chief determines that a drastic reduction in wood product prices has occurred. If the drastic reduction criteria specified in 36 CFR 223.52 are met for 2 consecutive calendar quarters, after contract award date, Contracting Officer will add 1 year to the contract term, upon Purchaser's written request. For each additional consecutive quarter such a drastic reduction occurs, Contracting Officer will, upon written request, add an additional 3 months to the term during Normal Operating Season. Contracting Officer must receive Purchaser's written request for a market-related contract term addition before the expiration of this contract.

The total amount of contract term addition is limited to the lesser of twice the length of the original contract or 3 years. The revised contract term may not exceed 10 years as a result of market-related contract term addition. Additional contract time may not be granted for those portions of the contract that have a required completion date or for those portions of the contract where Contracting Officer determines that the timber is in need of urgent removal or that timber deterioration or resource damage will result from delay.

When a contract is lengthened as a result of market-related contract term addition, any subsequent periodic payment date shall be delayed 1 month for each month added to the contract's term.

BT8.22 Termination for Catastrophe. In event of Catastrophic Damage, this contract may be modified under BT8.32, following rate redetermination under BT3.32, or terminated under this Subsection. Such termination shall not be considered a termination under BT8.34.

BT8.221 Termination by Purchaser. This contract shall be terminated, upon election and written notice by Purchaser, if Catastrophic Damage rate redetermination under BT3.32 shows that the appraised

weighted average Indicated Advertised Rate of all Included Timber remaining immediately prior to the catastrophe has been reduced through Catastrophic Damage by an amount equal to or more than the weighted average Current Contract Rate.

"Indicated Advertised Rates" are Forest Service estimates of fair market value of the timber.

BT8.222 Termination by Forest Service. This contract may be terminated by written notice from Contracting Officer, if there is Catastrophic Damage and Purchaser does not agree, under BT8.32, within 30 days of receipt from Contracting Officer of contract modifications proposed to permit the harvest of the catastrophe-affected timber.

BT8.23 Contract Term Extension. "Contract Term Extension" means an extension of the term of this contract, at the request of Purchaser, under this Subsection. This Subsection does not obligate Contracting Officer to grant Contract Term Extension.

When such extension is made, Forest Service shall make an appraisal using standard Forest Service methods and appraisal data in effect 45 days prior to the original Termination Date. Bid Premium Rates shall be added to such appraised rates to establish Flat Rates or Tentative Rates for the extension period. In event rates so established would develop Current Contract Value immediately prior to such an extension that is less than Current Contract Value at that time, Flat Rates and Tentative Rates in effect immediately prior to extension shall be retained for the extension period.

In consideration for granting an extension, Purchaser shall pay the Government for Purchaser's failure to cut and remove timber meeting Utilization Standards prior to Contract Term Extension, an amount that shall be the total of the costs to the Government resulting from the delay in harvest of Included Timber. Such costs will be determined by Forest Service and shall include, but not be limited to, the following:

(a) Interest at the Current Value of Funds Rate established by the Secretary of the Treasury, on Current Contract Value of timber remaining on Sale Area, less the credit balance of any deposit made pursuant to BT4.213, as of the original Termination Date, or as adjusted pursuant to BT8.21 or BT8.212, until the midpoint of the extension period;

(b) Increased costs of regeneration, including nursery stock loss, carryover, or replacement costs; and

(c) Costs of remarking timber on Sale Area, reestablishing cutting unit boundaries, and/or remarking areas requiring protection on Sale Area.

BT8.231 Conditions for Contract Term Extension. Contracting Officer may grant Purchaser's written request for Contract Term Extension, if Purchaser has met all of the following conditions at time of Purchaser's request:

(a) At least 75 percent of estimated quantity in AT2 has been cut and removed from Sale Area.

(b) Specified Roads needed by Purchaser for removal of all Included Timber, in accordance with the approved Plan of Operations submitted pursuant to

BT6.311, were constructed and accepted by Forest Service prior to the applicable road completion date shown in CT5.13.

(c) Purchaser's Operations to date have been in reasonable compliance with contract terms and the approved Plan of Operations under BT6.311.

(d) All contractual requirements have been met by Purchaser and accepted by Forest Service on area cut over at time of Purchaser's request, except for areas where logging is in progress at time of Purchaser's request. Purchaser's burning of current slash or seeding or planting for erosion control may be temporarily waived, if weather or other considerations make such work impractical.

(e) Any payment required under BT4.213 has been made.

Contract Term Extension shall not become effective, unless payments required by BT8.23 have been paid and the initial Extension Deposit required by BT4.217 has been made by the effective date of any extension.

BT8.3 Contract Modification. The conditions of this timber sale are completely set forth in this contract. Except as provided in BT8.32 and BT8.33, this contract can be modified only by written agreement between the parties. Only Contracting Officer may make contract modifications, with compensating adjustments to Current Contract Rates where appropriate, on behalf of Forest Service.

BT8.31 Changed Conditions. When it is agreed that the completion of certain work or other requirements hereunder would no longer serve the purpose intended because of substantial change in the physical conditions of Sale Area or Included Timber since the date of this contract, the requirements shall be waived in writing. The estimated cost of such waived work or other requirement shall be charged to Timber Sale Account.

BT8.32 Modification for Catastrophe. In event of Catastrophic Damage, Forest Service, in consultation with Purchaser, shall outline on Sale Area Map:

(a) Any areas of catastrophe-affected live and dead timber meeting Utilization Standards and having undesignated timber so situated that it should be logged with the designated timber;

(b) If needed, any such areas where the damaged undesignated timber can reasonably be logged separately; and

(c) Areas of affected or unaffected timber that are to be eliminated from Sale Area.

Forest Service shall locate and post the boundaries of all such areas, as needed.

After Sale Area Map has been outlined under this Subsection, Forest Service may propose contract modification to permit the harvest of catastrophe-affected timber. If Purchaser accepts Forest Service proposed modifications, this contract shall be modified to include rates redetermined under BT3.32 and other related revisions as necessary, such as revision of Operating Schedule to ensure prompt removal of affected timber when necessary to avoid further loss and provision for additional contract time, if needed.

BT8.33 Contract Suspension and Modification. (a) Contracting Officer may, by written order, delay or interrupt authorized operations under this contract or, notwithstanding BT8.3, modify this contract, in whole or in part:

(i) To prevent environmental degradation or resource damage, including, but not limited to, harm to habitat, plants, animals, cultural resources, or cave resources;

(ii) To ensure consistency with land and resource management plans or other documents prepared pursuant to the National Environmental Policy Act of 1969, 42 USC 4321-4347;

(iii) To conduct environmental analysis, including, but not limited to, engaging in consultation pursuant to the Endangered Species Act of 1973, 16 USC 1531, et seq.; or

(iv) Upon agreement of the Regional Forester, due to administrative appeal or litigation, regardless of whether Contracting Officer's order is required by a court order or this contract is named in such a proceeding.

(b) In the event of an order delaying or interrupting Purchaser's Operations under this Subsection, Purchaser's remedy shall be:

(i) Contract Term Adjustment,

(ii) reimbursement for Out-of-Pocket Expenses,

(iii) rate redetermination to measure any decline in the market,

(iv) temporary reduction of downpayment,

(v) temporary credit for unamortized Specified Road construction cost, and

(vi) temporary bond reduction.

However, the foregoing remedies shall be available only to the extent that the Contracting Officer's order was the sole and exclusive cause of the delay or interruption of Purchaser's operations.

(c) In cases of modification under this Subsection, Purchaser shall only receive a rate redetermination pursuant to BT3.31. However, if there is an order delaying or suspending operations in addition to a modification, then Purchaser shall also be entitled to the remedies provided under BT8.33(b) for such delay or suspension.

(d) Remedies awarded to the Purchaser shall not be duplicative, and Contracting Officer shall have the right to structure remedies provided herein to avoid duplicative compensation.

(e) Purchaser agrees that this Subsection, and the remedies provided herein shall apply regardless of any finding by any court or administrative body that the Forest Service failed to comply with any statute, regulation and/or policy in connection with awarding, advertising, or authorizing this sale, or a similar sale. However, nothing in this Subsection precludes Purchaser from exercising rights under the Contract Disputes Act.

BT8.34 Contract Termination. This contract may be terminated, in whole or in part, by Forest Service or Purchaser, as provided in Items BT8.341 and BT8.342, respectively. In the event of any such termination, Purchaser shall be entitled to the applicable remedies, subject to the limitation upon duplicative compensation

set forth in BT8.33(d). Purchaser agrees that this Subsection, and the remedies contained in the following Items shall apply regardless of any finding by any court or administrative body that the Forest Service failed to comply with any statute, regulation and/or policy in connection with awarding, advertising, or authorizing this sale, or a similar sale. However, nothing in this Subsection precludes Purchaser from exercising rights under the Contract Disputes Act.

BT8.341 Termination by Forest Service.

(a) The Chief or the Chief's designee may unilaterally terminate this contract, in whole or in part, for any of the reasons set forth in paragraph (a) of BT8.33.

(b) Purchaser's compensation for termination of this contract under this Item shall be:

(i) refund or release of advanced deposits for timber cut but not removed,

(ii) reimbursement for Out-of-Pocket Expenses, and

(iii) replacement timber under subparagraph (c), and/or liquidated damages under subparagraph (d); provided that liquidated damages shall be available if, and only if, after good faith efforts, the Parties (1) cannot locate replacement timber or agree upon the applicable stumpage price, or (2) the volume of deleted timber exceeds the volume of any replacement timber.

(c) Subject to applicable laws, regulations and policies, Forest Service and Purchaser shall make good faith efforts to identify replacement timber of similar volume, quality, access, and topography within Sale Area. If suitable replacement timber cannot be located within Sale Area, the parties shall expand the search to the National Forest in which the Sale Area is located. Stumpage price shall be adjusted under BT3.31 to account for differences between replacement timber and deleted timber. If Forest Service and Purchaser agree upon suitable replacement timber and the applicable stumpage price, then this contract shall not terminate and instead shall be modified pursuant to 36 CFR 223.85(c) and shall remain in force with respect to such replacement timber and, in the case of partial termination, any remaining Included Timber. If the parties cannot agree on suitable replacement timber or the applicable stumpage price of such timber, either party may end the search and Purchaser shall be compensated under subparagraph (d).

(d) Forest Service shall pay as fixed, agreed, and liquidated damages an amount equivalent to 15 percent of the estimated delivered log value of the volume of timber not harvested due to the termination or partial termination. Estimated delivered log value and volume of timber not harvested shall be determined by the Contracting Officer as of Termination Date, using Forest Service methods in use as of the Termination Date.

(e) In any instance of partial termination, in which the Forest Service deletes one or more cutting units from the Sale Area, Purchaser's sole and exclusive remedy with regard to remaining units shall be a rate redetermination pursuant to BT3.31. Purchaser shall be required to complete Contract Operations with regard to remaining

units and any obligations pertaining to cessation of operations on deleted units, including without limit erosion control, brush disposal, and road maintenance. If Purchaser fails to fulfill any such duty or obligation, then Contracting Officer may make deductions from compensation due Purchaser, including without limit costs and expenses of completing such work.

BT8.342 Termination by Purchaser. (a)

Purchaser may, by written notice, terminate this Contract, in whole or in part, as described herein,

(i) in the event of an order delaying or interrupting its operations pursuant to BT8.33, or

(ii) in the event of an order modifying this Contract pursuant to BT8.33, if Purchaser decides to reject the terms of the modification prior to its acceptance. Purchaser shall have the right to terminate this Contract in whole only when the Contracting Officer's order under BT8.33 applies to all cutting units within the Sale Area. When the order affects only a portion of the cutting units, Purchaser shall have the right to terminate this Contract in part, by deleting one or more of the units covered by the Contracting Officer's order. The foregoing right of termination, in whole or in part, shall not exist when the delay, interruption, or modification arises from wind, flood, landslide, fire, forest pest epidemic, or other major natural phenomenon.

(b) Purchaser's compensation for termination of this Contract, in whole or in part, under this Item shall be:

(i) refund or release of advanced deposits for timber cut but not removed,

(ii) reimbursement for Out-of-Pocket Expenses, and

(iii) if the duration of the delay or interruption exceeds either six months of Normal Operating Season time, or one calendar year from the date of the order, then: replacement timber as provided under (c) and/or liquidated damages under (d); provided that liquidated damages shall be available if, and only if, after good faith efforts, the Parties (1) cannot locate replacement timber or agree upon the applicable stumpage price, or (2) the volume of deleted timber exceeds the volume of any replacement timber.

(c) Subject to applicable laws, regulations and policies, Forest Service and Purchaser shall make good faith efforts to identify replacement timber of similar volume, quality, access, and topography within Sale Area. If suitable replacement timber cannot be located within Sale Area, the parties shall expand the search to the National Forest in which the Sale Area is located. Stumpage price shall be adjusted under BT3.31 to account for differences between replacement timber and deleted timber. If Forest Service and Purchaser agree upon suitable replacement timber and the applicable stumpage price, then this contract shall not terminate and instead shall be modified pursuant to 36 CFR 223.85(c) and shall remain in force with respect to such replacement timber and, in the case of partial termination, any remaining Included Timber. If the parties cannot agree on suitable replacement timber or the applicable stumpage price of such timber, either party may end the

search and Purchaser shall be compensated under subparagraph (d).

(d) Forest Service shall pay as fixed, agreed, and liquidated damages an amount equivalent to 15 percent of the estimated delivered log value of the volume of timber not harvested due to the termination or partial termination. Estimated delivered log value and volume of timber not harvested shall be determined by the Contracting Officer as of Termination Date, using Forest Service methods in use as of the Termination Date.

(e) In any instance of partial termination, in which Purchaser deletes one or more cutting units from Sale Area, Purchaser's sole and exclusive remedy with regard to remaining units shall be a rate redetermination pursuant to BT3.31. Purchaser shall be required to complete Contract Operations with regard to remaining units and any obligations pertaining to cessation of operations on deleted units, including without limit, erosion control, brush disposal, and road maintenance. If Purchaser fails to fulfill any such duty or obligation, then Contracting Officer may make deductions from compensation due Purchaser, including without limit costs and expenses of completing such work.

BT8.35 Out-of-Pocket Expenses.

"Out-of-Pocket Expenses" are Unrecovered expenditures arising directly from performing the contract that were rendered unrecovered due to delay, interruption, or termination pursuant to BT8.33 or BT8.34. An expenditure is "Unrecovered" within the meaning of this Subsection when Purchaser did not gain the benefit of its expenditure because Contract operations were not permitted. In determining whether an expenditure is "Unrecovered," Contracting Officer shall not conclude that an award of liquidated damages constitutes the benefit of that expenditure.

(a) Out-of-Pocket Expenses shall not include, in particular and without limitation, any of the following:

- (i) attorneys fees;
- (ii) costs and expenses of operating a saw mill or other processing facility;
- (iii) expectancy damages; and,
- (iv) anticipatory profits.

(b) Forest Service shall reimburse Purchaser for only the following Out-of-Pocket Expenses:

(i) Out-of-Pocket Expenses for maintenance of the timber sale performance and payment bonds during the period when operations were delayed or interrupted or, if terminated, from the date operations were halted until the expiration of the bonds;

(ii) Out-of-Pocket Expenses for maintenance of the downpayment or other cash deposits during the period when operations were delayed or interrupted or, if terminated, from the date operations were halted until the cash is returned to Purchaser;

(iii) Out-of-Pocket Expenses for the lesser of move-out and move-in or leaving equipment and/or logging camps on site, if the Purchaser and Contracting Officer have agreed to leave equipment and/or logging camps on site in lieu of move-out and move-in;

(iv) Out-of-Pocket Expenses for felling, bucking,

logging, skidding, yarding, and decking any products so processed, but not removed from Sale Area because: (1) the sale was terminated, or (2) the products no longer meet Utilization Standards because of delay or interruption;

(v) If terminated, in whole or in part, Out-of-Pocket Expenses for unamortized Temporary Roads, road maintenance, dust abatement and improvements authorized under B6.2;

(vi) Out-of-Pocket Expenses for the investment in Specified Roads during the period when operations were delayed or interrupted or, if terminated in whole or in part, Out-of-Pocket Expenses for unamortized Specified Road construction and reconstruction; and

(vii) If terminated, in whole or in part, Out-of-Pocket Expenses for bid preparation, including review of sale offering.

(c) Purchaser shall submit documentation of claimed expenditures, including those actually paid and those for which the Purchaser has a legal obligation to pay but has not yet paid, and supporting analysis to Contracting Officer to assist in Contracting Officer's calculation of reimbursement. Contracting Officer shall determine the amount of reimbursement under this Subsection using information from Purchaser and/or Forest Service methods in use on the date that operations were delayed, interrupted, or terminated. Purchaser's failure to substantiate any claimed Out-of-Pocket Expense may constitute grounds for Contracting Officer's denial of reimbursement.

(d) Purchaser shall make reasonable efforts to minimize its Out-of-Pocket Expenses.

BT8.36 Termination for Market Change. a) In the event of delay or interruption under BT8.33, exceeding 90 days, and Contract has not been modified to include replacement timber, this contract may be terminated upon election and written notice by Purchaser, if (i) a rate redetermination for market change under BT3.33 shows that the appraised weighted average Indicated Advertised Rate of all Included Timber remaining immediately prior to the delay or interruption has been reduced through a market change by an amount equal to or more than the the weighted average Current Contract Rate, or (ii) the appraised value of the remaining timber is insufficient to cover the adjusted base rates as determined under BT3.33.

(b) Prior to termination under this Subsection, Purchaser shall complete all obligations on areas not affected by the delay or interruption.

(c) Damages caused by termination of contract under this Subsection will be limited to Out-of-Pocket Expenses.

BT8.4 Performance by Other than Purchaser. The acquisition or assumption by another party, under an agreement with Purchaser, of any right or obligation of Purchaser under this contract shall be ineffective as to Forest Service, until Forest Service has been notified of such agreement and Contracting Officer has given written approval. In no case shall such recognition or approval:

(a) Operate to relieve Purchaser of the responsibilities or liabilities Purchaser has assumed hereunder or

(b) Be given unless such other party:

(i) Is acceptable to Forest Service as a Purchaser of timber and assumes in writing all of the obligations to Forest Service under the terms of this contract as to the uncompleted portion thereof or

(ii) Acquires the rights in trust as security and subject to such conditions as may be necessary for the protection of the public interests.

BT8.5 Sale of Other Materials. Forest Service reserves the right to sell from Sale Area during the period of this contract any materials or products not subject to its terms, but shall not permit removal, possession, or use thereof that will materially interfere with Purchaser's Operations. Purchaser shall not be obligated to do any work made necessary by the action of others.

BT8.6 Provisions Required by Statute.

BT8.61 Covenant against Contingent Fees.

Purchaser warrants that no person or agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial agencies maintained by Purchaser for the purpose of securing business. For breach or violation of this warranty, Forest Service shall have the right to annul this contract without liability or to require Purchaser to pay, in addition to the contract price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

BT8.62 Officials Not to Benefit. No member of Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, unless it is made with a corporation for its general benefit (18 USC 431, 433).

BT8.63 Nondiscrimination in Employment. If the total value of this contract is in excess of \$10,000, Purchaser agrees during its performance as follows:

(a) Purchaser will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. Purchaser will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Purchaser agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by Forest Service setting forth the provisions of this Subsection.

(b) Purchaser will, in all solicitations or advertisements for employees placed by or on behalf of Purchaser, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(c) Purchaser will send to each labor union or representative of workers with which Purchaser has a collective bargaining agreement or other contract or under-

standing, a notice to be provided by Forest Service, advising the labor union or worker's representative of Purchaser's commitments under this Subsection, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) Purchaser shall comply with all provisions of Executive Order No. 11246, as amended by Executive Order No. 11375 and Executive Order No. 12086, and the rules, regulations, and relevant orders of the Secretary of Labor.

(e) Purchaser will furnish all information and reports required by Executive Order No. 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to books, records, and accounts by Forest Service and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(f) In event of Purchaser's noncompliance with this Subsection or with any of such rules, regulations, or orders, this contract may be terminated or suspended, in whole or in part, and Purchaser may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246, as amended, and such other sanctions may be imposed and remedies invoked, as provided in Executive Order or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(g) Purchaser will include the provisions of paragraphs (a) through (f) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246, as amended, so that such provisions will be binding upon each Subcontractor or vendor. Purchaser will take such action with respect to any subcontract or purchase order as Forest Service may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event Purchaser becomes involved in, or is threatened with, litigation with a Subcontractor or vendor as a result of such direction by Forest Service, Purchaser may request the United States to enter into such litigation to protect the interests of the United States.

BT8.64 Debarment and Suspension Certification. Pursuant to 7 CFR Part 3017, Purchaser shall obtain certifications from its Subcontractors regarding debarment, suspension, ineligibility, and voluntary exclusion, including additional Subcontractors obtained after award of this contract. "Subcontractors" are participants in lower tier covered transactions.

Purchaser may rely upon a certification of a prospective Subcontractor that it is not proposed for debarment under 48 CFR 9.4, debarred, suspended, ineligible, or voluntarily excluded from participating in covered transactions or timber sales, unless Purchaser knows that the certification is erroneous.

Purchaser shall keep the certifications of its Subcontractors on file until timber sale Termination Date and any extensions thereof, and will provide a copy at the written request of Contracting Officer. Nothing contained in the foregoing shall be construed to require

establishment of a system of records in order to render in good faith the certification required by this Subsection. The knowledge and information of Purchaser is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

If Purchaser knowingly enters into a timber sale transaction with a person who is proposed for debarment under 48 CFR 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in covered transactions or timber sales, in addition to other remedies available to the Government, Forest Service may pursue available remedies, including suspension and/or debarment.

The Subcontractor for a timber sale shall complete a "Subcontractor Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion." An example of this certification is shown following the instructions for page 101 of this contract.

BT8.65 Contract Consistency With Other Laws. The contract shall govern if State and local environmental quality laws conflict with or preclude performance of contractual requirements.

BT9.0—PERFORMANCE AND SETTLEMENT

BT9.1 Performance Bond. As a further guarantee of the faithful performance of the provisions of this contract, Purchaser delivers herewith and agrees to maintain a surety bond in the dollar amount stated in AT14, unless the amount is adjusted as provided in BT9.11 or BT9.13. In lieu of surety bond, Purchaser may deposit into a Federal Depository, as directed by Forest Service under BT4.21, and maintain therein, cash in the dollar amount stated in AT14 or negotiable securities of the United States having market value at time of deposit of not less than the dollar amount stated in AT14.

Any adjustment or extension of time for completion of this contract beyond 1 year may be granted only with the consent of surety on bond or delivery of a new bond. Should the sureties on the bond delivered herewith, or any bond delivered hereafter in connection with this contract, become unsatisfactory to Forest Service, Purchaser shall, within 30 days of receipt of demand, furnish a new bond with surety satisfactory to Forest Service.

BT9.11 Bond Reduction. Upon Purchaser's written request, Contracting Officer shall redetermine the amount of Purchaser's performance bond to an amount not less than Purchaser's remaining obligations, including the value of Included Timber remaining on Sale Area, plus the estimated cost of uncompleted work required of Purchaser and any unpaid billings due on the timber sale. Contracting Officer shall provide written notice of the redetermined amount to Purchaser and to Purchaser's surety. Similarly, Contracting Officer shall report to Purchaser in writing the amount of deposited cash or deposited securities required thereafter, if such deposits exist in lieu of a surety bond.

As soon as security for the performance of this contract or the settlement of Claims incident thereto is no longer necessary, appropriate notice shall be given to

surety or deposits that may have been made in lieu of surety bond shall be returned to Purchaser, subject to the conditions in BT9.5.

BT9.12 Letters of Credit. Notwithstanding the provisions of BT9.1, approved letters of credit may be used in lieu of a surety bond for performance bond purposes. Such letters of credit shall be subject to approval by Contracting Officer.

BT9.13 Temporary Bond Reduction. When, under BT8.33, Contracting Officer orders a delay or interruption of Purchaser's Operations for more than 30 days when scheduled operations would be occurring but for the order, the performance bond amount required shall be temporarily reduced upon the written request of Purchaser or at the discretion of Contracting Officer. For the period of the delay or interruption, the performance bond may be reduced to an amount not less than the estimated cost of uncompleted work required of Purchaser and any unpaid billings due on the timber sale.

Upon Purchaser's receipt of written notice from Contracting Officer that the basis for the delay or interruption no longer exists, Purchaser shall restore the performance bond to the full amount shown in AT14 within 15 days. Purchaser shall not resume contract operations until the performance bond amount is fully restored.

BT9.2 Disputes. This contract is subject to the Contract Disputes Act of 1978 (41 USC 601, *et seq.*). Except as provided in the Contract Disputes Act of 1978, all disputes arising under or relating to this contract shall be resolved in accordance with this Section.

As used herein, "Claim" means a written demand or assertion by one of the parties seeking, as a legal right, the payment of money, adjustment or interpretation of contract terms, or other relief, arising under or relating to this contract. A voucher, invoice, or request for payment that is not in dispute when submitted is not a Claim. However, where such submission is subsequently not acted upon in a reasonable time, or disputed either as to liability or amount, it may be converted to a Claim. A Claim by Purchaser shall be made in writing and submitted to Contracting Officer for decision. A Claim by the Government against Purchaser shall be subject to a decision by Contracting Officer.

For Purchaser Claims of more than \$100,000, Purchaser shall submit with the Claim a certification that the Claim is made in good faith; the supporting data are accurate and complete to the best of Purchaser's knowledge and belief; and the amount requested accurately reflects the contract adjustment for which Purchaser believes the Government is liable. Purchaser, if an individual, shall execute the certification. When Purchaser is not an individual, the certification shall be executed by a senior company official in charge at Purchaser's plant or location involved or by an officer or general partner of Purchaser having overall responsibility for the conduct of Purchaser's affairs.

For Purchaser Claims of \$100,000 or less, Contracting Officer must render a decision within 60 days. For Purchaser Claims in excess of \$100,000, Contracting Of-

ficer must decide the Claim within 60 days or notify Purchaser of the date when the decision will be made.

Contracting Officer's decision shall be final unless Purchaser appeals or files a suit.

The authority of Contracting Officer does not extend to Claims or disputes that by statute or regulation other agencies are expressly authorized to decide.

Interest, at the Prompt Payment Rate established by the Secretary of the Treasury, on the amount found due on Purchaser's Claim shall be paid from the date the Claim is received by Contracting Officer until the date of the payment.

Except as the parties may otherwise agree, pending final resolution of a Claim of Purchaser arising under the contract, Purchaser shall proceed diligently with the performance of the contract in accordance with Contracting Officer's decision.

BT9.21 Time Limits for Submission of Claim.

Failure by Purchaser to submit a Claim within established time limits shall relinquish the United States from any and all obligations whatsoever arising under the contract or portions thereof. Purchaser shall file such Claim within the following time limits:

(a) When Purchaser constructs Specified Road, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification of acceptance;

(b) When Forest Service constructs Specified Road, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification authorizing use of road;

(c) For Payment Units and cutting units, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification that Payment Unit has been accepted; and

(d) In all other cases, Purchaser must file any Claim not later than 60 days after receipt of Contracting Officer written notification that timber sale is closed.

BT9.22 Contract Documents. All contract documents are intended to be consistent with each other. In case of discrepancy, the following is the order of precedence:

- (a) Special Provisions (CT)
- (b) Sale Area Map
- (c) Specific Conditions (AT) and Schedule of Items
- (d) Standard Provisions (BT)
- (e) Special project specifications
- (f) Plans, such as slash, erosion control, and dust abatement
- (g) Agreements between Purchaser and Forest Service, as authorized under the contract
- (h) Plans:
 - (i) Figured dimensions over scaled dimensions
 - (ii) Large scale Plans over small scale Plans
- (i) Standard specifications
- (j) Lists and/or tables in Plans over any conflicting notations on Plans
- (k) Shop Drawings

BT9.3 Breach. In event Purchaser breaches any of the material provisions of this contract, Forest Service

shall give Purchaser notice of such breach and, allowing reasonable time for remedy of such breach and of Forest Service's election to suspend, may give notice to suspend all or any part of Purchaser's Operations. Such notice of breach and notice to suspend Purchaser's Operations shall be written, except oral notices may be given if such breach constitutes an immediate threat to human life or a threat of immediate and irreparable damage to National Forest resources. Notwithstanding Section BT6.1, such oral suspension notice may be given to Purchaser's work supervisor or, in work supervisor's absence, to those performing the operation. An oral suspension notice shall be promptly followed by telephone notice and a written explanation from Forest Service to Purchaser.

Suspension under this Section shall not entitle Purchaser to any remedies arising under BT8.33.

Immediately upon oral or written suspension, Forest Service representative shall notify Contracting Officer of the suspension and related circumstances. Contracting Officer shall promptly review the suspension to determine if the suspension should be continued or lifted. Such suspension shall be lifted as early as conditions permit.

Upon receipt of oral or written notice of such breach, Purchaser shall remedy the breach as follows:

(a) If remedying such breach requires on-the-ground action by Purchaser, Purchaser shall have 30 practicable operating days during Normal Operating Season to remedy the breach, except under emergency conditions when action should not be delayed to prevent major damage or

(b) If such breach does not require on-the-ground action by Purchaser, such breach shall be remedied within 30 days.

BT9.31 Termination for Breach. Contracting Officer, with the concurrence of the Regional Forester, may terminate this contract for breach in the event Purchaser:

(a) Is convicted for violation of criminal statutes, civil standards, or any other offense indicating a lack of business integrity or honesty that seriously and directly affects the responsibility of Purchaser; including, but not limited to:

(i) Theft, forgery, bribery, embezzlement, falsification or destruction of records, making false statements, or receiving stolen property, any of which occurred in connection with obtaining, attempting to obtain, selling, trading, or processing public timber;

(ii) Fraud, criminal offenses, or violation of Federal or State antitrust laws, any of which occurred in connection with obtaining, attempting to obtain, or performing a public contract or subcontract; or

(iii) Threatening, resisting, intimidating, or interfering with Forest Officers engaged in, or on account of, the performance of their official duties involving the protection, improvement, or administration of National Forest lands;

(b) Is convicted for violation of criminal statutes or civil standards, orders, permits, or other regulations for environmental protection issued by a Federal agency, State agency, or political subdivision thereof in the conduct of operations hereunder on National Forest lands, pursuant to BT6.01;

(c) Has engaged in a pattern of activity that demonstrates flagrant disregard for the terms of this contract, such as, but not limited to, repeated suspensions for breach pursuant to BT9.3, causing undesignated timber meeting Utilization Standards to be unnecessarily damaged or negligently or willfully cut, or causing other serious environmental degradation or resource damage;

(d) Fails to comply with contract provisions related to nondiscrimination in employment; or

(e) Fails to remedy a breach of contract within time limits stated in BT9.3.

Damages due the United States for termination under this Subsection shall be determined pursuant to BT9.4.

BT9.4 Damages for Failure to Cut or Termination for Breach. (a) In event of Purchaser's failure to cut designated timber on portions of Sale Area by Termination Date or termination for breach under BT9.31, Forest Service shall appraise remaining Included Timber, unless termination is under BT8.22 or BT8.34. Such appraisal shall be made with the standard Forest Service method in use at time of termination.

(b) If the sale is resold, damages due shall be the amount by which Current Contract Value, plus costs described in paragraph (d) of this Section, exceeds the resale value at new Bid Rates.

(c) If the contract is not reoffered or there are no responsive bids on the reoffered contract, damages due shall be the amount by which Current Contract Value exceeds the value determined by appraisal, plus costs described in paragraph (d) of this Section.

(d) If applicable, the following costs shall be included in damages:

(i) The cost of resale or reoffering, including, but not limited to, salary costs, document preparation and duplication costs, mailing costs, and timber sale advertisement costs.

(ii) If Purchaser has failed to cut individual trees in the portions of Sale Area cut over and there is no resale of such individual trees, Purchaser shall pay Forest Service for cost of felling and removal or otherwise eliminating such uncut trees, except for occasional trees not cut for reasons stated in BT6.4.

(iii) The Government's loss caused by the delay in receipt of stumpage payments. Such loss will be measured by interest at the Current Value of Funds Rate established by the Secretary of the Treasury, on the unpaid contract value at Termination Date. Interest will be charged for the total number of months, or portions thereof, from Termination Date until midpoint of the contract resale period, less any time in excess of 1 year needed to make the resale.

(iv) Any increase in reforestation costs, including site preparation, seeding, and planting caused by Purchaser's failure to harvest Included Timber by Termination Date.

BT9.5 Settlement. If obligations of Purchaser have not been fully discharged by Termination Date, any money advanced or deposited hereunder shall be retained and applied toward unfulfilled obligations of Purchaser without prejudice to any other rights or remedies of Forest Service. Such funds may be treated as cooperative deposits under BT4.218 for uncompleted work 30 days after receipt of written notice from Contracting Officer to Purchaser of work to be done and Purchaser's failure to deny the obligation or to do the work.

BT9.6 Contract Closure. Contracting Officer shall give appropriate written notice to Purchaser when Purchaser has complied with the terms of this contract. Purchaser shall be paid refunds due from Timber Sale Account under BT4.24 and excess cooperative deposits under BT4.218.

DIVISION CT

Special Provisions

In accordance with AT19, the Sections, Subsections, and Items therein listed are attached and made a part hereof. The material is indexed by the numbering system used in Division BT. The numbers after the CT (that identifies material in this Division) indicates the Part, Section, Subsection, or Item of Division BT that is being supplemented or modified by each particular provision included in this Division.

USDA FOREST SERVICE

REPORT OF TIMBER SALE

APPRAISAL SUMMARY

Region: 5		Forest: Shasta-Trinity-14		Appr To: Weaverville (saw)				Appraisal Date: 24-Jan-08		
Appraiser: Laurie		District: Hayfork-52		Appraisal Type: <u>TEA (state-wide)</u>				Rollback Factor: 0%		
Sale #: 52801		Sale Name: Hyampom ROW Settlement		Base Period: 7/20/07-1/16/08				Required KV Cost: 0.00		
Species and Volumes		1	2	3	4	5	6	7	Average	Total
1. Species	PP/JP	SP/WWP		DF						
2. Species Code	122	117		205						
3. Product-Unit of Measure	01-03	01-03		01-03						
4. % by Species Volume	4.2%	6.5%	0.0%	89.3%	0.0%	0.0%	0.0%			100.0%
5. Volume - CCF	6.42	9.81	0.00	135.04	0.00	0.00	0.00			151.27
5a. Volume - MBF	4.01	6.48	0.00	92.04	0.00	0.00	0.00			102.54
5b. Volume - Green Tons	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00
6a. Log Pond Value - \$/CCF	218.74	246.97	160.00	293.08	225.00	132.50			286.93	
6b. Base Period Avg Bid - \$/CCF									40.43	
Sale Costs Adjustments - \$/CCF		Base	Sale	Adjustment	Road & Haul Informantion			Miles	Total Cost	
7. Average Log Pond Values	190.58	286.93	96.35		Specified Road Constuction			0.00	0.00	
8. PAL Fire Protection	6.08	29.13	-23.05		Specified Road Reconstruction			0.00	0.00	
9. Stump-to-Truck	107.01	0.00	107.01		Temp Road Construction			0.00	0.00	
10. Biomass	15.42	0.00	15.42		Haul Miles (sawlogs)			0.00		
11. Hauling	45.16	26.91	18.25		Haul Miles (biomass)			0.00		
12. Sale Specific	3.71	0.00	3.71							
13. Slash Work	2.21	0.00	2.21							
14. Erosion Control	2.57	0.00	2.57							
15. Specified Road Cost	2.12	0.00	2.12							
16. Road Maintenance	6.26	0.00	6.26							
17. Brush Disposal Deposit	2.85	0.00	2.85							
18. Surface Replacement Deposit	0.91	0.00	0.91							
19. Road Maintenance Deposit	0.65	0.00	0.65							
20. Engineering Deposit	0.26	0.00	0.26							
21. Temporary Road Cost	0.80	0.00	0.80							
22.									Total Adj	Adj. Bid
23. Total Adj. & Adjusted Bid									236.32	276.75
Advertised Rates - \$/CCF		1	2	3	4	5	6	7	Average	Total
24. Avg Bid Alloc to Species	210.98	238.21	0.00	282.68	0.00	0.00			276.75	41,864.66 saw timber
25. Rollback Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			0.0%	
26. Indicated Advertised Rate	210.98	238.21	0.00	282.68	0.00	0.00	0.00	0.00	276.75	41,864.66 saw timber
27. Regional Minimum Rates	27.95	27.95	0.00	27.95	0.00	0.00	0.00	0.00	27.95	4,228.00 saw timber
28. Base Rates	27.95	27.95	0.00	27.95	0.00	0.00	0.00	0.00	27.95	4,228.00 saw timber
29. Adjustment to Base Rates	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 saw timber
30a.Advertised Rates	210.98	238.21	0.00	282.68	0.00	0.00	0.00	0.00	276.75	41,864.66 saw timber
30b.Total Sale Value										41,864.66
Appraisal Factors		1	2	3	4	5	6	7	Average	Total
31. Base Indices	260.06	351.74	0.00	184.91	0.00	0.00	0.00			
32. Index Name Code	WWPAE	WWPAF	0.0000	WWPAF	0.0000	0.0000	0.0000			
33. Rollback Amount	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
34. Quadradic Mean Diameter	17.6	22.7	0.0	23.6	0.0	0.0	0.0			
35. Conversion Factor (mbf/ccf)	0.6252	0.6608	0.5000	0.6816	0.5000	0.5000			0.6778	saw timber
36. Timber Property Value	17.95	17.95	0.00	17.95	0.00	0.00				

Species	Net MBF 6"-12"	Net MBF 13"-15"	Net MBF 16"-24"	Net MBF 25"-32"	Net MBF 33" +	Net MBF 6"-11"	Net MBF 12"-19"	Net MBF 20"-23"	Net MBF 24" +	Net MBF 6"-15"	Net MBF* 16" +	Net MBF camp run
PP/JP	0.00	0.00	0.00	0.00	0.00	0.61	1.52	0.90	0.99	0.00	0.00	
SP/WWP	0.00	0.00	0.00	0.00	0.00	0.48	2.34	1.84	1.82	0.00	0.00	
WF/RF												0.00
DF												92.04
IC												0.00
LP												0.00

*Net MBF categories by small-end log DIB's

Appendix B

U.S. Department of the Army Corps of Engineers 404 Permit



DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1398

REPLY TO

DEC 11 2007

Regulatory Branch

SUBJECT: File Number 26733N

Mr. Christopher Longley
Central Federal Lands Highway Division
Federal Highways Administration
Attn: Chris Longley
12300 West Dakota Avenue, Suite 280
Lakewood, CO 80228

Dear Mr. Longley:

This letter is written in response to your submittal of a Pre-Construction Notification/Permit Application dated November 28, 2007, concerning Department of the Army authorization to discharge fill in connection with roadway prism and realignment improvements to the Segment 5 portion (3.82 miles in length) of Hyampom Road between Mile Post 10/KM Station 16+450) and Mile Post 14/KM Station 22+580). The project site is located on Hyampom Road, adjacent to Hayfork Creek, between the communities of Hyampom and Hayfork, in Trinity County, California. The work includes but is not limited to: installation of new culverts, replacement of culverts, culvert extension, rock slope protection placement at culvert outlets and other locations and erosion control work. A total of 0.24 acres of wetlands and other waters of the United States would be impacted by segments 2, 4, and 5 of Hyampom Road Improvement Project. For 2008, Segment 5 would be constructed only. Segments 2 and 4 would be built in subsequent years. Wetland mitigation at a 1.5:1 ratio would be implemented to compensate for project impacts of segments 2, 4 and 5. The Segment 5 project would involve placement of 540 cubic yards of rip-rap, 269 cubic yards of culvert bedding (sand/fine granular material), and 6.6 cubic yards of concrete.

Based on a review of the following information you submitted: *Section 404 Application For Hyampom Road CA PFH 114-1(1), Shasta-Trinity National Forest, Trinity County, CA*, dated November 2007; *California Forest Highway 114, Hyampom Road Hayfork to Hyampom, Trinity County, California Wetland and Mitigation Monitoring Plan*, July 26, 2007; *Biological Assessment California Forest Highway 114, Hyampom Road State Route 3 (Hayfork) to Hyampom, Trinity County, California*, Volume I and Volume II, November 18, 2004; and an inspection of the project site conducted by Corps personnel on February 2, 2004, your project qualifies for authorization under Department of the Army Nationwide Permit 14 Linear Transportation Projects (72 Fed. Reg. 11092, March 12, 2007), pursuant to Section 404 of the Clean Water Act (33 U.S.C. Section 1344). All work shall be completed in accordance with the plans and drawings titled, "U.S. Department of Transportation Federal Highway Administration Central Federal Lands Highway Division, Hyampom Road Segment 5" in fourteen (14) sheets

dated 11-28-07 (Enclosure 1).

The project must be in compliance with the General Conditions cited in Enclosure 2 for this Nationwide Permit authorization to remain valid. Non-compliance with any condition could result in the suspension, modification, or revocation of the authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This Nationwide Permit authorization does not obviate the need to obtain other State or local approvals required by law.

This authorization will remain valid for two years from the date of this letter unless the Nationwide Permit is modified, suspended, or revoked. If you have commenced work or are under contract to commence work prior to the suspension, or revocation of the Nationwide Permit and the project would not comply with the resulting Nationwide Permit authorization, you have twelve (12) months from that date to complete the project under the present terms and conditions of the Nationwide Permit. Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, Enclosure 3, verifying that you have complied with the terms and conditions of the permit.

This authorization will not be effective until you have obtained a Section 401 water quality certification from the California Regional Water Quality Control Board (RWQCB), North Coast Region. If the RWQCB fails to act on a valid request for certification within two (2) months after receipt of a complete application, the Corps will presume that water quality certification has been obtained. You shall submit a copy of the certification to the Corps prior to the commencement of work.


To ensure compliance with this Nationwide Permit authorization, the following special conditions shall be implemented:

1. This Corps permit does not authorize you to take an endangered species. In order to legally take a listed species, you must have a separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit or a Biological Opinion (BO) under ESA Section 7 with "incidental take" provisions with which you must comply). The enclosed Incidental Take Statement (Enclosure 4) from the U.S. Fish and Wildlife Service (FWS) BO dated October 17, 2005 contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this Corps permit is conditional upon your compliance with all of the mandatory terms and conditions associated with incidental take authorized by the attached BO, whose terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take and it would also constitute non-compliance with this Corps permit. The FWS is the appropriate authority to determine compliance with the terms and conditions of its BO and with the ESA.

2. The permittee shall compensate for 0.24 acres of wetlands and other waters of the United States impacted by construction of Segments 2, 4, and 5 by implementing on site (site off Hyampom Road near vicinity of impacted areas) mitigation on a 1.5:1 ratio. The wetland mitigation shall be implemented in accordance with the wetland mitigation plan titled, *California Forest Highway 114, Hyampom Road Hayfork to Hyampom Trinity Count, California Wetland Mitigation and Monitoring Plan*, dated July 26, 2007.
3. The permittee shall ensure that the target acreage of wetlands mitigation would be 0.36 acres. Wetland mitigation and monitoring activity shall be concurrent with project construction. Monitoring of wetland mitigation shall occur for five years after issuance of this permit. The mitigation shall be monitored on an annual basis and monitoring reports shall be submitted to the Corps of Engineers.
4. The permittee shall provide the Corps of Engineers with a final mitigation and monitoring report at end of the five-year monitoring period. The permittee shall include a wetland delineation of the mitigation site to be submitted to the Corps for review. The Corps will then field verify success of the mitigation and confirm the final wetland delineation at the mitigation site.

Should you have any questions regarding this matter, please call David Ammerman of our Eureka Office, Regulatory Branch at 707-443-0855.. Please address all correspondence to the Eureka Office, USACE, Woodley Island, 601 Startare Drive, Eureka, California and refer to the File Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available online at <http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,


Jane M. Hicks
Chief, Regulatory Branch

Enclosures

Copy furnished (w/encl 1 only):

US EPA, San Francisco, CA
US FWS, Arcata, CA
US NMFS, Arcata, CA
CA DFG, Redding, CA
CA RWQCB, Santa Rosa, CA

Ms. Janice Smith
Trinity County Department of Transportation
P.O. Box 2490
Weaverville, CA 96093

Appendix C

CALTRANS Encroachment Permit

ENCROACHMENT PERMIT

TR-0120 (REV. 6/2000)

Permit No.
0207-NBR-0538

In compliance with (Check one):

☒ Your application of **November 8, 2007**☐ Utility Notice No. _____ of _____☐ Agreement No. _____ of _____☐ R/W Contract No. _____ of _____Dist/Co/Rte/PM
02-TRI-3-30.73 LTDate
December 20, 2007Fee Paid
\$ _____ Deposit
\$ ExemptPerformance Bond Amount (1)
\$ _____ Payment Bond Amount (2)
\$ _____

Bond Company

Bond Number (1) _____ Bond Number (2) _____

Customer Reference No. _____

TO:Central Federal Lands Highway Division
12300 West Dakota Avenue
Lakewood CO 80228Attention: Michael Daigler
Phone: 720-963-3000**, PERMITTEE****and subject to the following, PERMISSION IS HEREBY GRANTED to:**

Install, maintain, and remove when no longer required one construction area sign left of Post Mile 30.73 on State Route 3 near Douglas City in Trinity County per the attached sign details.

PERMITTEE RESPONSIBILITY: It is understood and agreed by the Permittee that utilizing this permit shall constitute an acceptance of the provisions of this Permit and all attachments.**GENERAL SPECIFICATIONS:****NOTIFY STATE'S REPRESENTATIVE:** At least five working days before starting any work (**ten days if any lane closures or traffic control will be necessary**), notify the Caltrans Area Superintendent Milt Apple, telephone 530-623-3628, and Permit Inspector Ken Kubisch, telephone 530-225-3306, P.O. Box 496073, Redding, CA 96049-6073, who will arrange for inspection and approval of the work covered by this permit.

(Continued)

THIS PERMIT IS NOT A PROPERTY RIGHT AND DOES NOT TRANSFER WITH THE PROPERTY TO A NEW OWNER.

The following attachments are also included as part of this permit (Check applicable):

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	General Provisions
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Utility Maintenance Provisions
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Special Provisions Permit Closure Schedule, Sign Details
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	A Cal-OSHA permit, if required: Permit No. _____
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	As-Built Plans Submittal Route Slip for Locally Advertised Projects
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Storm Water Special Provisions

In addition to fee, the permittee will be billed actual costs for:

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Review
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Inspection
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Field Work

(If any Caltrans effort expended)☐ Yes ☒ No The information in the environmental documentation has been reviewed and is considered prior to approval of this permit.This permit is void unless the work is completed before **December 31, 2011**.

This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.

No project work shall be commenced until all other necessary permits and environmental clearances have been obtained.

1 - Permittee
1 - Kubisch
1 - Milt Apple

APPROVED:

BRIAN CRANE, District Director, District 2

BY:

Stacey Barnes
STACEY BARNES, District Permit Engineer, District 2

1 - File

FC

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 653-3657 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

FM 91 1436

Name: Central Federal Lands Highway Division
Permit No.: 0207-NBR-0538
Date: December 20, 2007

STANDARD SPECIFICATIONS AND STANDARD PLANS: Reference to Standard Specifications shall pertain to the State of California Standard Specifications, dated May 2006 including all "Amendments to the May 2006 Standard Specifications", updated October 5, 2007 and located at the following internet web page address: http://www.dot.ca.gov/hq/esc/oe/specifications/SSPs/2006-SSPs/SSPs_HMA/2007-10_updates/S1-020H_E_A10-05-07.doc. Any reference to "Contractor" and "Engineer" in the Standard Specifications is amended to read as "Permittee" and "State's Representative" respectively. Any reference to measurement and payment in the Standard Specifications shall not pertain to this permit. Reference to the Standard Plans shall pertain to the State of California Standard Plans, dated May 2006.

GENERAL PROVISIONS: Permittee's attention is directed to the *General Provisions* attachment of this encroachment permit with special attention to items 13, 14, 15, and 26. In case of conflict between the *General Provisions* and the provisions set forth in this encroachment permit, the encroachment permit provisions shall take precedence over and shall be used in lieu of the *General Provisions*.

FUTURE MOVING OF FACILITIES: Permittee shall, at Permittee's expense, rearrange permitted facilities at the request of the State for construction, reconstruction, or maintenance work on the highway performed by or for the State.

COOPERATION: Attention is directed to Section 7-1.14, "Cooperation," and Section 8-1.10, "Utility and Non-Highway Facilities," of the Standard Specifications. Work allowed by this encroachment permit may conflict with concurrent Caltrans or encroachment permit projects. Permittee shall coordinate all work with State's Representative. Such coordination may result in work delays and/or relocation of the permitted work, the costs of which shall be borne entirely by Permittee.

LIABILITY FOR DAMAGES: Permittee shall be liable for damage to the State highway caused by his operation.

PROTECTION OF SURVEY MONUMENTS: Your attention is directed to Section 7-1.11, "Preservation of Property," of the Standard Specifications and to Section 8771, "Monuments," of the Business and Professions Code. Permittee shall physically inspect the work site and locate survey monuments prior to beginning work. Monuments shall be referenced or reset in accordance with the Business and Professions Code.

TIME EXTENSION: Permittee is advised that any request for time extension shall require a full reevaluation of the original application. Such a reevaluation may conclude with further mitigation, at Permittee's expense, to comply with upgrades in highway design policies.

TERMS OF PERMIT: Any failure on the part of Permittee or his contractor or agent to abide by the terms of this permit or the directions of State's Representative shall be just cause for immediate stoppage of the work and revocation of the permit.

WORK HOURS: No work shall be performed during inclement weather, on weekends, on designated holidays, or after 3:00 P.M. on the day preceding designated holidays, unless specifically authorized or directed by State's Representative. See "TRAFFIC CONTROL" section in this permit for additional time restrictions for work requiring lane closures.

EQUIPMENT ON ROADWAY: All equipment used on the paved surface of the State highway shall be rubber tired or rubber tracked, unless authorized by State's Representative, and shall comply with the legal weight requirements for operation on a State highway.

HUMAN REMAINS: If human remains are uncovered, all work shall immediately stop and Permittee shall immediately notify the local Coroner, as required per Health and Safety Code Section 7050.5, and notify State's Representative.

CONDITION OF WORK SITE: When the permitted work is complete, the area within the State right of way shall be left in a neat and non-erodible condition to the satisfaction of State's Representative. All surplus material and debris shall be disposed of in a lawful manner outside the State right of way.

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Date: December 20, 2007

PUBLIC SAFETY: Permittee shall provide for the safety of traffic and the public in conformance with Section 7-1.09, "Public Safety," of the Standard Specifications and these provisions.

Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the following work areas, Permittee shall close the adjacent traffic lane unless otherwise provided in the Standard Specifications and these special provisions:

Approach Speed of Public Traffic (Posted Limit) (Miles Per Hour)	Work Areas
Over 45	Within 6 feet of a traffic lane but not on a traffic lane
35 to 45	Within 3 feet of a traffic lane but not on a traffic lane

The lane closure provisions of this section shall not apply if permanent or temporary railing or barrier protects the work area.

The approach end of temporary railing (Type K), installed in accordance with the requirements in this section "Public Safety" and in Section 7-1.09, "Public Safety," of the Standard Specifications shall be offset a minimum of 15 feet from the edge of the traffic lane open to public traffic. The temporary railing shall be installed on a skew toward the edge of the traffic lane of not more than one foot transversely to 10 feet longitudinally with respect to the edge of the traffic lane. If the 15-foot minimum offset cannot be achieved, the temporary railing shall be installed on the 10 to 1 skew to obtain the maximum available offset between the approach end of the railing and the edge of the traffic lane, and an array of temporary crash cushion modules shall be installed at the approach end of the temporary railing. Temporary crash cushion modules shall be of sizes, quantity and placement as determined by State's Representative.

Suspended loads or equipment shall not be moved nor positioned over public traffic or pedestrians.

PROSECUTION OF WORK: Once work authorized by this permit is begun, it shall be diligently prosecuted to completion. Should suspension of work be necessary for any reason, trenches and excavations shall be closed (backfilled and compacted), and the area graded, obstructions removed, and erosion control measures installed to the satisfaction of State's Representative.

WATER POLLUTION PREVENTION: The California State Water Resources Control Board (SWRCB) has adopted the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (Order No. 99-08-DWQ, NPDES Permit CAS000002) (hereafter called General Permit) and the NPDES Permit for Storm Water Discharges from Caltrans Properties, Facilities and Activities (Order No. 99-06-DWQ, NPDES No. CAS000003) (hereafter called Caltrans Permit). The goal of those permits is to prevent the discharge of pollutants associated with construction activity from entering surface and underground waters of the State. Permittee shall comply with all applicable requirements of those NPDES permits.

MITIGATION AND MONITORING: Permittee shall be responsible for ensuring that all mitigation and monitoring requirements, as proposed in the lead agency's environmental document, are fulfilled and that all regulatory agency coordination and permit requirements are completed prior to beginning construction.

COPY OF PERMIT ON SITE: A copy of this encroachment permit shall be kept at the project site at all times.

AS-BUILT PLANS: After completion of the permitted work and prior to acceptance by Caltrans, Permittee shall submit standard unit (US) as-built plans to the Caltrans District 2 Permit office. As-built plans shall be tied to points that are compatible with the Caltrans datum for the area. If no datum exists, permanent reference points shall be set that can be used to accurately locate the facilities. A responsible member of Permittee's staff shall sign the as-built plans.

COMPLETION OF WORK: After completion of the authorized work, Permittee shall immediately complete and mail the attached *Notice of Completion* postal card.

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Permit No.: 0207-NBR-0538
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MAINTENANCE OF FACILITIES:

MAINTENANCE OF FACILITIES: Permittee shall, at Permittee's expense, maintain any facilities constructed or permitted under this encroachment permit.

UTILITIES:

CONFLICTS WITH UTILITIES: Permittee shall be responsible for the relocation or adjustment of any utility required as the result of work authorized by this permit. If existing public or private utilities conflict with the construction of project, permittee will make necessary arrangements with the owners of such utilities for their protection, relocation or removal of such facilities. Total costs for such protection, relocation or removal shall be borne by permittee in compliance with the terms of the Highway Encroachment Permits, Case Law, Public Utility Regulations and Property Rights. Permittee shall require any utility company performing relocation in the State's right of way to obtain a State Encroachment Permit prior to the performance of said relocation work.

NOTIFICATION OF U.S.A.: Permittee shall call Underground Service Alert at least two working days prior to performing any excavation deeper than one-foot or other work close to any underground pipeline, conduit, duct, wire, or other structure. The regional notification center phone number is 1-800-642-2444.

NOTIFICATION OF CALTRANS: Caltrans is not part of USA Underground Locate; therefore, prior to beginning any work, Caltrans electrical supervisor Jon Miller, shall be notified at 530-225-3469 to locate electrical connections, and Bill Belcher at 530-225-3313 to locate all underground count stations.

TRAFFIC CONTROL:

TRAFFIC CONTROL SYSTEMS: No lane closures are authorized under this permit.

SHOULDER CLOSURES: Whenever vehicles or equipment are parked on the shoulder within 6 feet of a traffic lane, the shoulder area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of traveled way (fog line) at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of 9 cones or portable delineators shall be used for the taper. A W20-1 (Road Work Ahead) or W21-5 (Shoulder Work) sign shall be mounted on a telescoping flag tree with flags. The flag tree shall be placed where directed by the Engineer. Should State's Representative observe any deviation from these plans, all work will be suspended until satisfactory steps have been taken to ensure compliance. Shoulder closures shall not be placed during inclement weather or when the roadway is icy or frozen.

ADVANCE NOTIFICATION FOR SHOULDER CLOSURES: By noon Monday, Permittee shall submit a schedule of planned lane and shoulder closures for the following week period, defined as Saturday through the following Friday. If Monday is a designated holiday, the schedule shall be delivered on Tuesday. Permittee shall submit a completed copy of the attached *Permit Closure Schedules* form by fax to the Caltrans District 2 Encroachment Permit office at fax number (530) 225-3097. If a fax is unavailable, the schedule may be called in by voice telephone at (530) 225-3400.

NOTIFICATION FOR SHOULDER CLOSURES: Permittee shall notify the Caltrans District 2 Encroachment Permit office by telephone at (530) 225-3400 at the time a lane or shoulder closure is installed, and again when the closure has ended. Permittee shall provide the following information; Permittee's name, encroachment permit number, location (county, route and post mile limits), direction of closure (e.g., southbound, eastbound, full road), and the time when installing or ending the closure. For weekends and after hours, Permittee shall leave a message at the above telephone number, with the details as indicated. **Permittee shall also notify Encroachment Permits office if a scheduled closure is cancelled. Permittee MUST call to report status each day a closure has been requested.**

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CONSTRUCTION AREA SIGN:

CONSTRUCTION AREA SIGN: Signs that are no longer required or that convey inaccurate information to the public shall be immediately covered or removed, or the information shall be corrected. Covers for construction area signs shall be of sufficient size and density to completely block out the complete face of the sign. The retroreflective face of the covered sign shall not be visible either during the day or at night. Covers shall be fastened securely so that the signs remain covered during inclement weather. Covers shall be replaced when they no longer cover the sign properly.

SIZE, LETTERING, AND MOUNTING: Signs shall conform to the attached sign details.

BOTTOM CLEARANCE: Bottom of signs shall be 5 feet above the highway surface.

OBSTRUCTION OF OTHER SIGNS: The proposed signs shall not obstruct the view of existing signs.

MAINTENANCE: Permittee shall be responsible for all future maintenance and upkeep of the signs and ground area immediately adjacent thereto.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
NOTICE OF COMPLETION
TR-0128 (REV 06/01) CT #7541-5529-1

0207-NBR-0538

PERMIT NO.

02-TR1-3-30.73 CT

LOCATION

All work authorized by the above-numbered permit was
completed on _____

Insert Date

SIGNATURE OF PERMITTEE

Central Federal Lands Highway Div

**ADA
Notice**

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916)654-6410 or TDD (916) 654-3880 or write Records and Forms management, 1120 N Street, MS-89, Sacramento, CA 95814

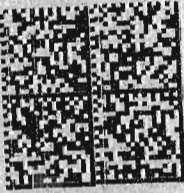
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US POSTAGE

Encroachment Permits Office
State of California
Department of Transportation
PO Box 496073
Redding, CA 96049-6073

1. **AUTHORITY:** The Department's authority to issue encroachment permits is provided under, Div. 1, Chpt. 3, Art. 1, Sect. 660 to 734 of the Streets and Highways Code.
2. **REVOCATION:** Encroachment permits are revocable on five days notice unless otherwise stated on the permit and except as provided by law for public corporations, franchise holders, and utilities. These General Provisions and the Encroachment Permit Utility Provisions are subject to modification or abrogation at any time. Permittees' joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State highway right of way are exceptions to this revocation.
3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay permit fees when due can result in rejection of future applications and denial of permits.
4. **ASSIGNMENT:** No party other than the permittee or permittee's authorized agent is allowed to work under this permit.
5. **ACCEPTANCE OF PROVISIONS:** Permittee understands and agrees to accept these General Provisions and all attachments to this permit, for any work to be performed under this permit.
6. **BEGINNING OF WORK:** When traffic is not impacted (see Number 35), the permittee shall notify the Department's representative, two (2) days before the intent to start permitted work. Permittee shall notify the Department's Representative if the work is to be interrupted for a period of five (5) days or more, unless otherwise agreed upon. All work shall be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this permit.
7. **STANDARDS OF CONSTRUCTION:** All work performed within highway right of way shall conform to recognized construction standards and current Department Standard Specifications, Department Standard Plans High and Low Risk Facility Specifications, and Utility Special Provisions. Where reference is made to "Contractor and Engineer," these are amended to be read as "Permittee and Department representative."
8. **PLAN CHANGES:** Changes to plans, specifications, and permit provisions are not allowed without prior approval from the State representative.
9. **INSPECTION AND APPROVAL:** All work is subject to monitoring and inspection. Upon completion of work, permittee shall request a final inspection for acceptance and approval by the Department. The local agency permittee shall not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.
10. **PERMIT AT WORKSITE:** Permittee shall keep the permit package or a copy thereof, at the work site and show it upon request to any Department representative or law enforcement officer. If the permit package is not kept and made available at the work site, the work shall be suspended.
11. **CONFLICTING ENCROACHMENTS:** Permittee shall yield start of work to ongoing, prior authorized, work adjacent to or within the limits of the project site. When existing encroachments conflict with new work, the permittee shall bear all cost for rearrangements, (e.g., relocation, alteration, removal, etc.).
12. **PERMITS FROM OTHER AGENCIES:** This permit is invalidated if the permittee has not obtained all permits necessary and required by law, from the Public Utilities Commission of the State of California (PUC), California Occupational Safety and Health Administration (Cal-OSHA), or any other public agency having jurisdiction.
13. **PEDESTRIAN AND BICYCLIST SAFETY:** A safe minimum passageway of 4' shall be maintained through the work area at existing pedestrian or bicycle facilities. At no time shall pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades shall be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street. Attention is directed to Section 7-1.09 Public Safety of the Department Standard Specifications.
14. **PUBLIC TRAFFIC CONTROL:** As required by law, the permittee shall provide traffic control protection warning signs, lights, safety devices, etc., and take all other measures necessary for traveling public's safety. While providing traffic control, the needs and control of all road users [motorists, bicyclists and pedestrians, including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA)] shall be an essential part of the work activity.

Day and night time lane closures shall comply with the California Manual on Uniform Traffic Control Devices (Part 6, Temporary Traffic Control), Standard Plans, and Standard Specifications for traffic control systems. These General Provisions are not intended to impose upon the permittee, by third parties, any duty or standard of care, greater than or different from, as required by law.
15. **MINIMUM INTERFERENCE WITH TRAFFIC:** Permittee shall plan and conduct work so as to create the least possible inconvenience to the traveling public; traffic shall not be unreasonably delayed. On conventional highways, permittee shall place properly attired flagger(s) to stop or warn the traveling public in compliance with the California Manual on Uniform Traffic Control Devices (Chapter 6E, Flagger Control).
16. **STORAGE OF EQUIPMENT AND MATERIALS:** The storage of equipment or materials is not allowed within State highway right-of-way, unless specified within the Special Provisions of this specific encroachment permit. If Encroachment Permit Special Provisions allow for the storage of equipment or materials within the State right of way, the equipment and material storage shall comply with Standard Specifications, Standard Plans, Special Provisions, and the Highway Design Manual. The clear recovery zone widths must be followed and are the minimum desirable for the type of facility indicated below: freeways and expressways - 30', conventional highways (no curbs) - 20', conventional highways (with curbs) - 1.5'. If a fixed object cannot be eliminated, moved outside the clear recovery zone, or modified to be made yielding, it should be shielded by a guardrail or a crash cushion.
17. **CARE OF DRAINAGE:** Permittee shall provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Standard Specifications, Standard Plans and/or as directed by the Department's representative.
18. **RESTORATION AND REPAIRS IN RIGHT OF WAY:** Permittee is responsible for restoration and repair of State highway right of way resulting from permitted work (State Streets and Highways Code, Sections 670 et. seq.).

activity is being performed under the obligations provided by and contemplated by the permit, except as otherwise provided by statute.

The duty of the permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code. The permittee waives any and all rights to any type of expressed or implied indemnity against the State, its officers, employees, and State contractors. It is the intent of the parties that the permittee will indemnify and hold harmless the State, its officers, employees, and State's contractors, from any and all claims, suits or actions as set forth above regardless of the existence or degree of fault or negligence, whether active or passive, primary or secondary, on the part of the State, the permittee, persons employed by the permittee, or acting on behalf of the permittee.

For the purpose of this section, "State's contractors" shall include contractors and their subcontractors under contract to the State of California performing work within the limits of this permit.

29. **NO PRECEDENT ESTABLISHED:** This permit is issued with the understanding that it does not establish a precedent.

30. **FEDERAL CIVIL RIGHTS REQUIREMENTS FOR PUBLIC ACCOMMODATION:**

A. The permittee, for himself, his personal representative, successors in interest, and assigns as part of the consideration hereof, does hereby covenant and agree that:

1. No person on the grounds of race, color, or national origin shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
2. That in connection with the construction of any improvements on said lands and the furnishings of services thereon, no discrimination shall be practiced in the selection and retention of first-tier subcontractors in the selection of second-tier subcontractors.
3. That such discrimination shall not be practiced against the public in their access to and use of the facilities and services provided for public accommodations (such as eating, sleeping, rest, recreation), and operation on, over, or under the space of the right of way.
4. That the permittee shall use the premises in compliance with all other requirements imposed pursuant to Title 15, Code of Federal Regulations, Commerce and Foreign Trade, Subtitle A. Office of the Secretary of Commerce, Part 8 (15 C.F.R. Part 8) and as said Regulations may be amended.
5. That in the event of breach of any of the above nondiscrimination covenants, the State shall have the right to terminate the permit and to re-enter and repossess said land and the land and the facilities thereon, and hold the same as if said permit had never been made or issued.

31. **MAINTENANCE OF HIGHWAYS:** The permittee agrees, by acceptance of a permit, to properly maintain any encroachment. This assurance requires the permittee to provide inspection and repair any damage, at permittee's expense, to State facilities resulting from the encroachment.

32. **SPECIAL EVENTS:** In accordance with subdivision (a) of Streets and Highways Code Section 682.5, the Department of Transportation shall not be responsible for the conduct or operation of the permitted activity, and the applicant agrees to defend, indemnify, and hold harmless the State and the city or county against any and all claims arising out of any activity for which the permit is issued.

Permittee understands and agrees that it will comply with the obligations of Titles II and III of the Americans with Disabilities Act of 1990 in the conduct of the event, and further agrees to indemnify and save harmless the State of California, all officers and employees thereof, including but not limited to the Director of Transportation, from any claims or liability arising out of or by virtue of said Act.

33. **PRIVATE USE OF RIGHT OF WAY:** Highway right of way shall not be used for private purposes without compensation to the State. The gifting of public property use and therefore public funds is prohibited under the California Constitution, Article 16.

34. **FIELD WORK REIMBURSEMENT:** Permittee shall reimburse State for field work performed on permittee's behalf to correct or remedy hazards or damaged facilities, or clear debris not attended to by the permittee.

35. **NOTIFICATION OF DEPARTMENT AND TMC:** The permittee shall notify the Department's representative and the Transportation Management Center (TMC) at least 7 days before initiating a lane closure or conducting an activity that may cause a traffic impact. A confirmation notification should occur 3 days before closure or other potential traffic impacts. In emergency situations when the corrective work or the emergency itself may affect traffic, TMC and the Department's representative shall be notified as soon as possible.

36. **SUSPENSION OF TRAFFIC CONTROL OPERATION:** The permittee, upon notification by the Department's representative, shall immediately suspend all lane closure operations and any operation that impedes the flow of traffic. All costs associated with this suspension shall be borne by the permittee.

37. **UNDERGROUND SERVICE ALERT (USA) NOTIFICATION:** Any excavation requires compliance with the provisions of Government Code Section 4216 et. seq., including, but not limited to notice to a regional notification center, such as Underground Service Alert (USA). The permittee shall provide notification at least 48 hours before performing any excavation work within the right of way.

19. **RIGHT OF WAY CLEAN UP:** Upon completion of work, permittee shall remove and dispose of all scraps, brush, timber, materials, etc. off the right of way. The aesthetics of the highway shall be as it was before work started.
20. **COST OF WORK:** Unless stated in the permit, or a separate written agreement, the permittee shall bear all costs incurred for work within the State right of way and waives all claims for indemnification or contribution from the State.
21. **ACTUAL COST BILLING:** When specified in the permit, the Department will bill the permittee actual costs at the currently set hourly rate for encroachment permits.
22. **AS-BUILT PLANS:** When required, permittee shall submit one (1) set of folded as-built plans within thirty (30) days after completion and approval of work in compliance with requirements listed as follows:
1. Upon completion of the work provided herein, the permittee shall send one vellum or paper set of As-Built plans, to the State representative. Mylar or paper sepia plans are not acceptable.
 2. All changes in the work will be shown on the plans, as issued with the permit, including changes approved by Encroachment Permit Rider.
 3. The plans are to be stamped or otherwise noted AS-BUILT by the permittee's representative who was responsible for overseeing the work. Any original plan that was approved with a State stamp, or Caltrans representative signature, shall be used for producing the As-Built plans.
 4. If As-Built plans include signing or striping, the dates of signing or striping removal, relocation, or installation shall be shown on the plans when required as a condition of the permit. When the construction plans show signing and striping for staged construction on separate sheets, the sheet for each stage shall show the removal, relocation or installation dates of the appropriate staged striping and signing.
 5. As-Built plans shall contain the Permit Number, County, Route, and Post Mile on each sheet.
 6. Disclaimer statement of any kind that differ from the obligations and protections provided by Sections 6735 through 6735.6 of the California Business and Professions Code, shall not be included on the As-Built plans. Such statements constitute non-compliance with Encroachment Permit requirements, and may result in the Department of Transportation retaining Performance Bonds or deposits until proper plans are submitted. Failure to comply may also result in denial of future permits, or a provision requiring a public agency to supply additional bonding.
23. **PERMITS FOR RECORD PURPOSES ONLY:** When work in the right of way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt permit is issued to the permittee for the purpose of providing a notice and record of work. The Permittee's prior rights shall be preserved without the intention of creating new or different rights or obligations. "Notice and Record Purposes Only" shall be stamped across the face of the permit.
24. **BONDING:** The permittee shall file bond(s), in advance, in the amount set by the Department. Failure to maintain bond(s) in full force and effect will result in the Department stopping of all work and revoking permit(s). Bonds are not required of public corporations or privately owned utilities, unless permittee failed to comply with the provision and conditions under a prior permit. The surety company is responsible for any latent defects as provided in California Code of Civil Procedures, Section 337.15. Local agency permittee shall comply with requirements established as follows: In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local agency permittee agrees to require the construction contractor furnish both a payment and performance bond in the local agency's name with both bonds complying with the requirements set forth in Section 3-1.02 of State's current Standard Specifications before performing any project construction work. The local agency permittee shall defend, indemnify, and hold harmless the State, its officers and employees from all project construction related claims by contractors and all stop notice or mechanic's lien claimants. The local agency also agrees to remedy, in a timely manner and to State's satisfaction, any latent defects occurring as a result of the project construction work.
25. **FUTURE MOVING OF INSTALLATIONS:** Permittee understands and agrees to rearrange a permitted installation upon request by the Department, for State construction, reconstruction, or maintenance work on the highway. The permittee at his sole expense, unless under a prior agreement, JUA, or a CCUA, shall comply with said request.
26. **ARCHAEOLOGICAL/HISTORICAL:** If any archaeological or historical resources are revealed in the work vicinity, the permittee shall immediately stop work, notify the Department's representative, retain a qualified archaeologist who shall evaluate the site, and make recommendations to the Department representative regarding the continuance of work.
27. **PREVAILING WAGES:** Work performed by or under a permit may require permittee's contractors and subcontractors to pay appropriate prevailing wages as set by the Department of Industrial Relations. Inquiries or requests for interpretations relative to enforcement of prevailing wage requirements are directed to State of California Department of Industrial Relations, 525 Golden Gate Avenue, San Francisco, California 94102.
28. **RESPONSIBILITY FOR DAMAGE:** The State of California and all officers and employees thereof, including but not limited to the Director of Transportation and the Deputy Director, shall not be answerable or accountable in any manner for injury to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee, or for damage to property from any cause. The permittee shall be responsible for any liability imposed by law and for injuries to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee, or for damage to property arising out of work, or other activity permitted and done by the permittee under a permit, or arising out of the failure on the permittee's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time, work or other activity is being performed under the obligations provided by and contemplated by the permit.
- The permittee shall indemnify and save harmless the State of California, all officers, employees, and State's contractors, thereof, including but not limited to the Director of Transportation and the Deputy Director, from all claims, suits or actions of every name, kind and description brought for or on account of injuries to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee and the public, or damage to property resulting from the performance of work or other activity under the permit, or arising out of the failure on the permittee's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time, work or other

PERMIT CLOSURE SCHEDULES

A written schedule of all lane closures is to be submitted to the Encroachment Permits Office by:

Phone #: (530) 225-3400 or Fax #: (530) 225-3097

-SUBMIT BEFORE NOON MONDAY -

For the week period beginning the FOLLOWING Saturday through Friday.

Permit Inspector Name _____



District 02

Date:

Permittee/Contractor:

Phone Number:

Permit No:

County:

Route(s):

Post Mile(s):

Work Description:

☐ Utility ☐ Widening ☐ Overlay ☐ Realignment ☐ Drainage ☐ Structure
☐ Traffic Signal/Lighting ☐ Landscape ☐ Slope Repair ☐ Road Connection
☐ Other:

Lane Closures: ☐ Freeway ☐ Expressway ☐ Conventional

#1 ☐ NB ☐ SB ☐ EB ☐ WB Description:

#2 ☐ NB ☐ SB ☐ EB ☐ WB Description:

#3 ☐ NB ☐ SB ☐ EB ☐ WB Description:

Facility Closure: ☐ Rest Area ☐ Truck Scale

Vertical & Horizontal Reductions:

Reduced Lane Width = Reduced Vertical Clearance =

Ramp Closures: ☐ Yes ☐ No
If Yes, describe work, date and time of closure

Date Public Affairs Office notified _____
Date public notification signing placed at ramp _____
(7-14 days in advance of closure)

Detour Available: ☐ YES ☐ NO
If Yes, attach detour route plan.

Authorization to use county or city roads for detour: ☐ YES ☐ NO

Date Work Begins:

Date Work Ends:

Geographic Location Public Can Relate To:

Type of Work Performed:

Length of Delay:

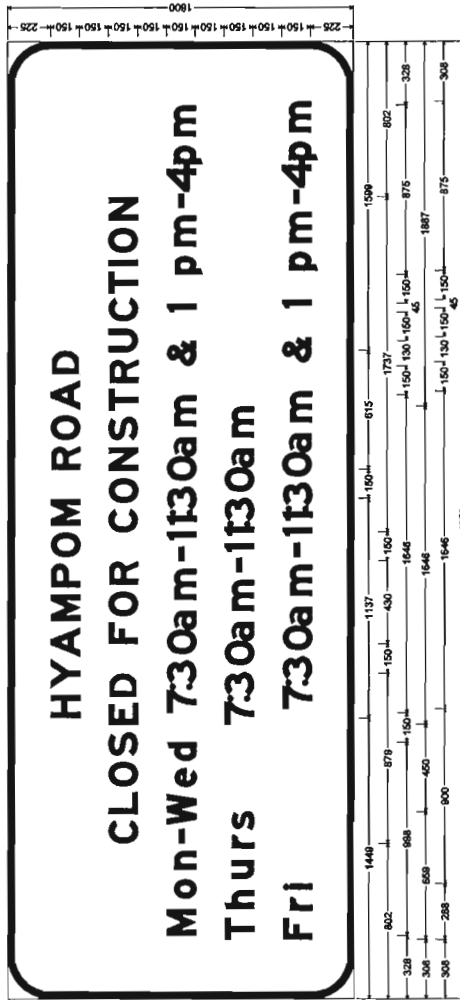
Days of the Week:

Hours of Actual Work:

Type of Traffic Control/Restriction (check all that apply):

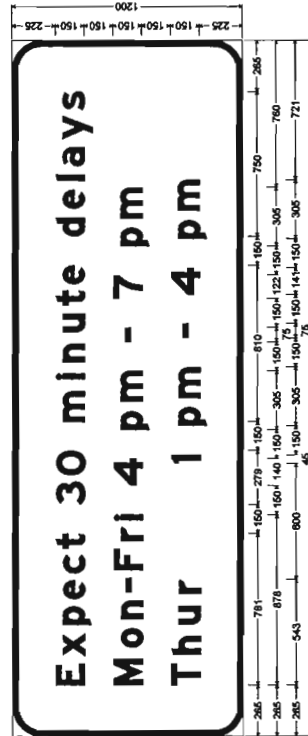
Standard Plans: ☐ T10 ☐ T10A ☐ T11 ☐ T12 ☐ T13 ☐ T14 ☐ T15 ☐ T16
☐ T17 ☐ T10 Shoulder Closure ☐ Temp. Signals ☐ Pilot Car ☐ Stop,
Proceed When Clear ☐ Changeable Message Signs ☐ Radar Trailer ☐ HAR
☐ COZEEP ☐ Speed Reduction ☐ CHP Traffic Break ☐ Other:

REG	STATE	PROJECT	SHEET	TOTAL
RS	CA	CA PRY 114-11(1) HYAMPOM ROAD	NO.	SHEETS



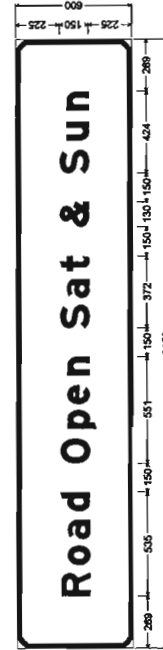
Open: 25mm Radius, 30mm Border, White on Orange;
HYAMPOM ROAD | E Mod; [Closed for Construction] E Mod; [Mon-Wed 7:30am-11:30am & 1 pm-4pm] E Mod; [Thurs 7:30am-11:30am] E Mod;
[Fri 7:30am-11:30am & 1 pm-4pm] E Mod;

TEMPORARY TRAFFIC CONSTRUCTION SIGN "SPECIAL A"



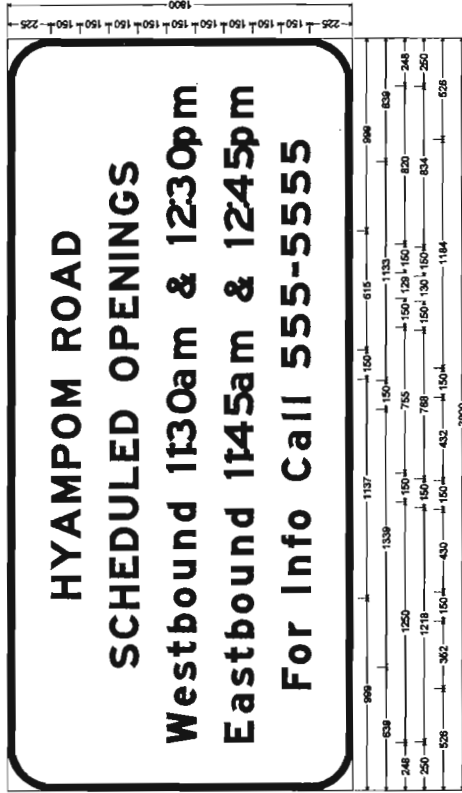
Open: 25mm Radius, 30mm Border, White on Orange;
[Expect 30 minute delays] E Mod; [Mon-Fri 4 pm - 7 pm] E Mod; [Thurs 1 pm - 4 pm] E Mod;

TEMPORARY TRAFFIC CONSTRUCTION SIGN "SPECIAL B"



Open: 25mm Radius, 30mm Border, White on Orange;
[Road Open Sat & Sun] E Mod;

TEMPORARY TRAFFIC CONSTRUCTION SIGN "SPECIAL C"



Open: 25mm Radius, 30mm Border, White on Orange;
HYAMPOM ROAD | E Mod; [Scheduled Openings] E Mod; [Westbound 11:30am & 12:30pm] E Mod;
[Eastbound 11:45am & 12:45pm] E Mod; [For Info Call 555-5555] E Mod;

TEMPORARY TRAFFIC CONSTRUCTION SIGN "SPECIAL-D"

Notes:

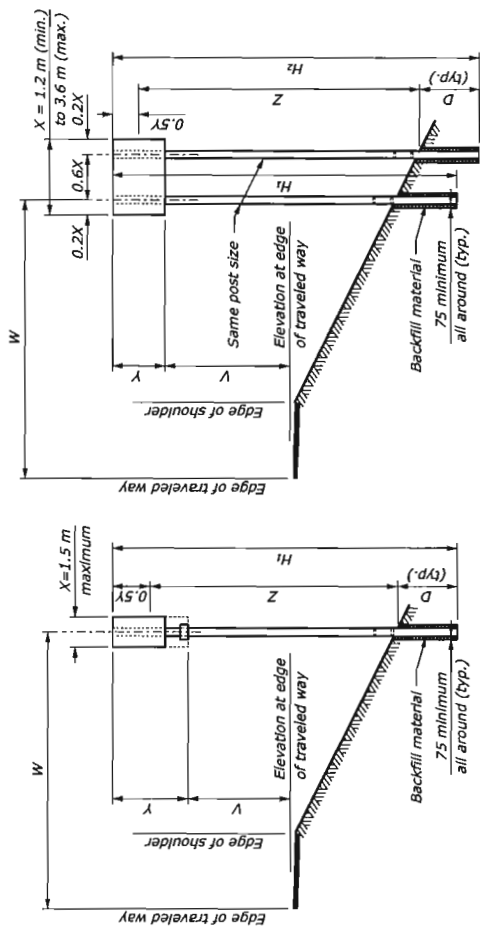
1. Install signs "Special A", "Special B" and "Special C" on same posts.
2. Dimensions of sign panels shown are the maximum allowed.
3. Final wording of message will be approved by the CO.
4. See Special M633-B for sign post details.

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION
METRIC SPECIAL
TEMPORARY TRAFFIC SPECIAL CONSTRUCTION SIGNS
SPECIAL M635-B

No Scale

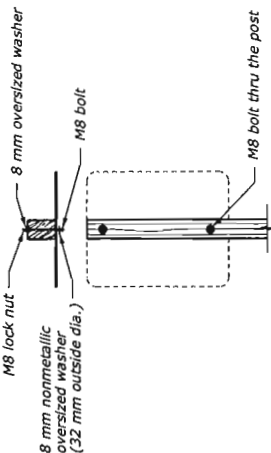
Saw cut notch full width of post. Omit notch for single post installations.

Notch depth (where required)
(See Post Selection table)



TWO POST SIGNS

SINGLE POST SIGNS



TYPICAL MOUNTING FOR SIGNS WITHOUT ANGLES

WOOD POST SELECTION TABLE						
POST SIZE (mm)	NUMBER OF POSTS				D (m)	Notch depth and hole diameter (mm)
	1	2	3	4		
100 x 100	2.2	4.3	6.6	18.7	0.9	-
100 x 150	5.0	10.8	15.3	20.3	1.2	45 mm
150 x 150	6.6	13.3	19.9	26.6	1.2	45 mm
150 x 200	8.4	23.8	35.8	47.6	1.2	65 mm
150 x 250	10.8	33.0	49.6	66.1	1.5	-
200 x 250	16.1	45.1	67.5	90.0	1.5	-
200 x 300	21.7	64.7	97.0	129.4	1.8	-

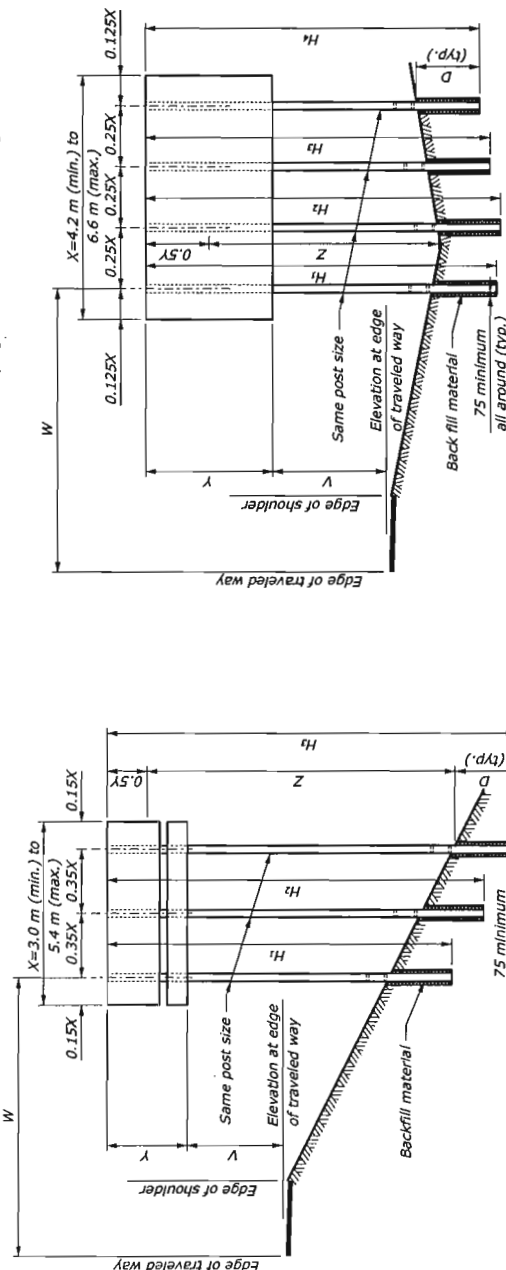
Values shown are the maximum permitted. If the product of XYZ exceeds the limit for the largest post, use steel post installation.

MINIMUM DISTANCE TO SIGN		
Location	Lateral Offset (W)	Mounting Height (V)
Rural Districts	1.8 m	1.5 m
Business or Residence Districts	0.6 m	2.1 m

W may be reduced by 0.3 m in rural districts for a secondary sign mounted below another sign.

SIGN INSTALLATION ANGLE

For all retroflectorized signs where $W > 7.5$ m



THREE POST SIGNS

FOUR POST SIGNS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

**PERMANENT SIGN
INSTALLATION
WOOD POSTS**

SPECIAL
M633-B

STORM WATER SPECIAL PROVISIONS FOR MINIMAL OR NO IMPACT

TR-0170 (Rev. 06/2004)

- 1. NPDES REQUIREMENTS:** Permittee shall be responsible for full compliance with the Caltrans Storm Water Program and the Caltrans NPDES permit requirements. For additional information, visit the Caltrans Stormwater Website at <http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm>
- 2. RESPONSIBILITY FOR DEBRIS:** Permittee shall be responsible for preventing all dirt, trash, debris and other construction waste from entering storm drains, local creeks, or other bodies of water.
- 3. VEHICLES AT THE WORK SITE:** Permittee shall prevent all vehicles, equipment, etc. from leakage or mud tracking onto roadways.
- 4. VEHICLE FUEL AT THE WORKSITE:** Permittee equipment fueling and maintenance activities shall not result in any pollution at the job site.
- 5. CLEANING VEHICLES AT WORKSITE:** Permittee shall clean all equipment with clean water only in a bermed area or over a drip pan large enough to prevent run-off. No soaps, solvents, degreasers, etc shall be used in State right of way. Any water from this operation shall be collected and disposed of at an appropriate site.
- 6. WEATHER CONDITIONS AT WORKSITE:** All paving, painting, grinding, and saw-cutting operations shall be performed during dry weather.
- 7. FRESH AC:** Fresh AC shall not be washed.
- 8. PROTECTION OF DRAINAGE:** Permittee shall protect/cover gutters, ditches, drainage courses, and inlets with sand/gravel bags, fiber rolls, etc., to the satisfaction of the State representative during paving operations, saw-cutting, etc.
- 9. SAW CUTTING:** No dry saw-cutting shall be allowed.
- 10. SPOILS & RESIDUE:** Permittee shall vacuum or sweep any saw-cut spoils, debris, residue, etc. No spoils, debris, residue, etc. shall be washed into a drainage system.
- 11. PAINT:** Rinsing of paintbrushes or materials is not permitted in state right-of-way. Oil based paint sludge and unusable thinner shall be disposed of at an approved hazardous waste site.
- 12. GROUT & MORTAR:** All construction materials including concrete, grout, cement containing premixes and mortar shall be stored under cover and separated away from drainage areas. Stored materials shall not reach a storm drain.
- 13. CONCRETE EQUIPMENT/VEHICLES:** Concrete equipment/trucks shall be washed out off of State right of way or in a designated washing area as required by Caltrans Standards.
- 14. SOIL DISTURBANCE:** Soil disturbing activities shall be avoided during the rainy season. If grading activities during wet weather are allowed in your permit, all control measures necessary to prevent erosion shall be implemented.
- 15. EXISTING VEGETATION:** Mature vegetation is the best form of erosion control. Disturbance to existing vegetation shall be minimized whenever possible.
- 16. SLOPES:** In cases where slopes are disturbed during construction, soil shall be secured with erosion control and soil stabilization measures. Fiber rolls shall be placed downslope until the soil is secure.
- 17. CATCH BASINS:** Sand, dirt, and similar materials shall be stored at least 3-meters (10-feet) from catch basins and covered with a tarp during wet weather or when rain is forecast.
- 18. SWEEPING:** Roadways and other paved areas shall be swept daily. Roadways or work areas shall not be washed down with water.
- 19. CONTAMINATED WATER:** The State representative shall be notified in case any unusual discoloration, odor, texture in ground water, in excavated material or abandoned underground tanks, pipes, or buried debris are encountered.
- 20. DIESEL FUELS:** Use of diesel as a form-oil shall not be Permitted.
- 21. DEWATERING:** Any effluent discharged into any storm water system requires a waste discharge permit from the Regional Water Quality Control Board. The permittee shall provide the State Representative with a copy of the Waste Discharge Permit.

Appendix D

NPDES Permit



State Water Resources Control Board



Linda S. Adams
Secretary for
Environmental
Protection

Division of Water Quality
1001 I Street o Sacramento, California 95814 o (916) 341-5536
Mailing Address: P.O. Box 1977 o Sacramento, California o 95812-
1977
FAX (916) 341-5543 o Internet Address:
<http://www.waterboards.ca.gov>
Email Address: stormwater@waterboards.ca.gov

**Arnold
Schwarzenegger**
Governor

Approved Date: 01/08/2008

Donna Harmon
USDA Forest Service
PO Box 159
Hayfork, CA 96041

RECEIPT OF YOUR NOTICE OF INTENT (NOI)

The State Water Resources Control Board (State Water Board) has received and processed your NOI to comply with the terms of the General Permit for Storm Water Discharges Associated with Construction Activity. Accordingly, you are required to comply with the permit requirements.

The Waste Discharger Identification (WDID) number is: **1 53C350330** .
Please use this number in any future communications regarding this permit.

SITE DESCRIPTION

OWNER: USDA Forest Service
DEVELOPER: Fed Hwy Admin Central Federal Lands Hwy Division
SITE INFORMATION: Hyampom Road CA PFH 114 1
SITE LOCATION: Hyampom Rd btwn Hyampom CA Hyampom, CA 96046
COUNTY: Trinity
TOTAL DISTRUBED ACRES: 31.5
START DATE: 03/26/2008
COMPLETION DATE: 03/26/2011

When construction is complete or ownership is transferred, **dischargers are required to submit a Notice of Termination (NOT)** to the local Regional Water Board. All State and local requirements must be met in accordance with Special Provision No. 7 of the General Permit. If you do not submit a NOT when construction activity is completed you will continue and are responsible to pay the annual fee invoiced each January.

If you have any questions regarding permit requirements, please contact your Regional Water Board at **(707) 576-2220**. Please visit the storm water web page at www.waterboards.ca.gov/stormwtr/index.html to obtain an NOT and other storm water related information and forms.

Sincerely,

Storm Water Section

Division of Water Quality

California Environmental Protection Agency